

chain nodes :

1 2 9 22 26 27 28 33

ring nodes :

3 4 5 6 7 8 10 11 12 13 14 17 18 19 20

chain bonds :

1-2 1-22 2-5 8-9 9-10 11-33

ring bonds :

3-4 3-8 4-5 5-6 6-7 7-8 10-11 10-14 11-12 12-13 13-14 13-17 14-20 17-18  
18-19 19-20

exact/norm bonds :

1-22 2-5 3-4 3-8 4-5 5-6 6-7 7-8 10-11 10-14 11-33

exact bonds :

1-2 8-9 9-10 11-12 12-13

normalized bonds :

13-14 13-17 14-20 17-18 18-19 19-20

isolated ring systems :

containing 10 :

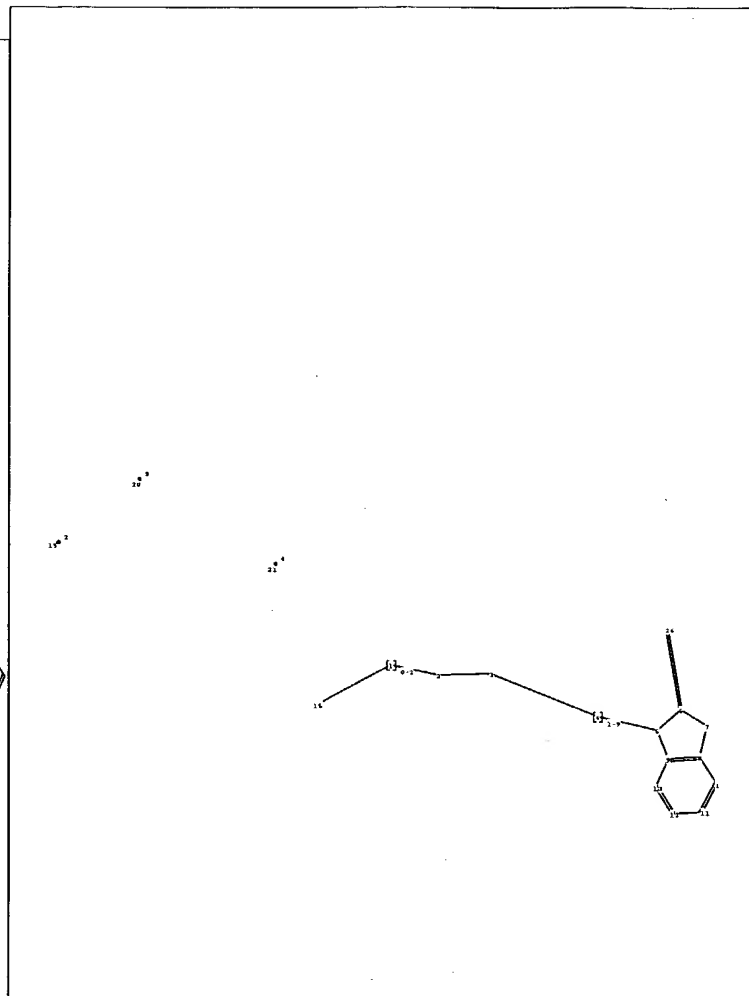
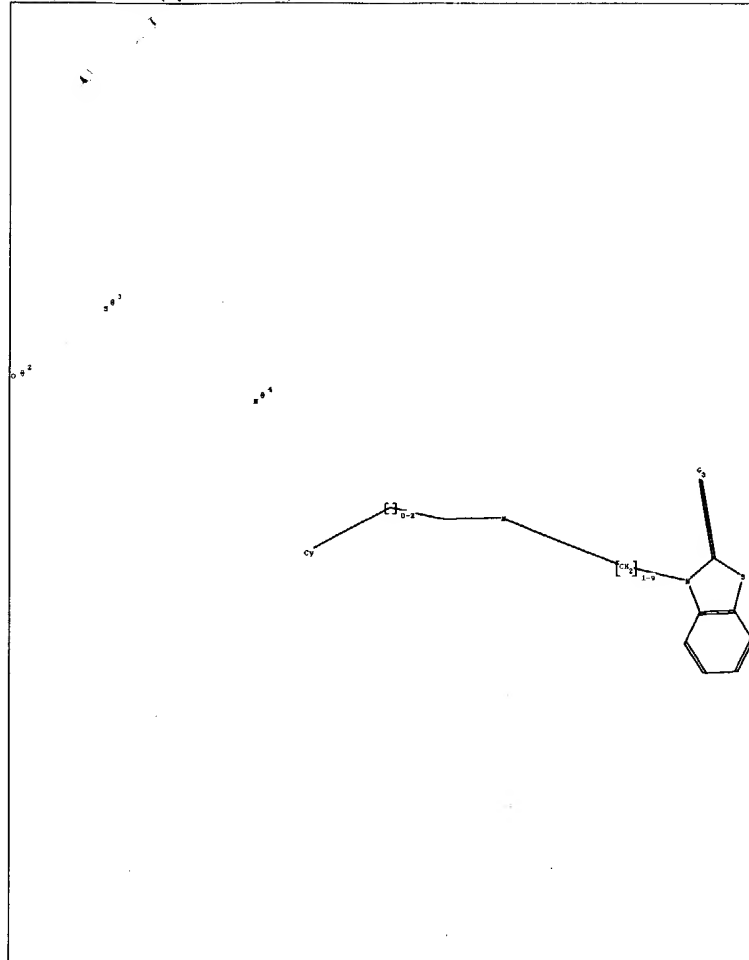
G2

G3:[\*2],[\*3],[\*4]

Match level :

1:CLASS 2:CLASS 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:Atom  
 11:Atom 12:Atom 13:Atom 14:Atom 17:Atom 18:Atom 19:Atom 20:Atom 22:Atom 26:CLASS  
 27:CLASS 28:CLASS 33:CLASS

C:\stnweb\Queries\9b.str



```

chain nodes :
  1  2  3  4 15 19 20 21 26
ring nodes :
  5  6  7  8  9 10 11 12 13
chain bonds :
  1-2 1-15 2-3 3-4 4-5 6-26
ring bonds :
  5-6 5-9 6-7 7-8 8-9 8-10 9-13 10-11 11-12 12-13
exact/norm bonds :
  1-15 2-3 5-6 5-9 6-26
exact bonds :
  1-2 3-4 4-5 6-7 7-8
normalized bonds :
  8-9 8-10 9-13 10-11 11-12 12-13
isolated ring systems :
  containing 5 :

```

G2

G3:[\*2],[\*3],[\*4]

Match level :

```

1:CLASS 2:CLASS 3:Atom 4:CLASS 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 15:Atom 19:CLASS 20:CLASS 21:CLASS 26:CLASS

```

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 Jul 12 BEILSTEIN enhanced with new display and select options,  
 resulting in a closer connection to BABS  
NEWS 4 AUG 02 IFIPAT/IFIUDB/IFICDB reloaded with new search and display  
 fields  
NEWS 5 AUG 02 CAPlus and CA patent records enhanced with European and Japan  
 Patent Office Classifications  
NEWS 6 AUG 02 The Analysis Edition of STN Express with Discover!  
 (Version 7.01 for Windows) now available  
NEWS 7 AUG 27 BIOCOMMERCE: Changes and enhancements to content coverage  
NEWS 8 AUG 27 BIOTECHABS/BIOTECHDS: Two new display fields added for legal  
 status data from INPADOC  
NEWS 9 SEP 01 INPADOC: New family current-awareness alert (SDI) available  
NEWS 10 SEP 01 New pricing for the Save Answers for SciFinder Wizard within  
 STN Express with Discover!  
NEWS 11 SEP 01 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX  
NEWS 12 SEP 14 STN Patent Forum to be held October 13, 2004, in Iselin, NJ  
NEWS 13 SEP 27 STANDARDS will no longer be available on STN  
NEWS 14 SEP 27 SWETSCAN will no longer be available on STN  
  
NEWS EXPRESS JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT  
 MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
 AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004  
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NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
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\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 20:50:26 ON 19 OCT 2004

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 20:50:33 ON 19 OCT 2004

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STRUCTURE FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

DICTIONARY FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

=> s l1

SAMPLE SEARCH INITIATED 20:54:23 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 2 TO 124

PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> s l1 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 20:54:27 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 44 TO ITERATE

100.0% PROCESSED 44 ITERATIONS

18 ANSWERS

SEARCH TIME: 00.00.01

L3 18 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

157.94

158.15

FILE 'HCAPLUS' ENTERED AT 20:54:30 ON 19 OCT 2004

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FILE COVERS 1907 - 19 Oct 2004 VOL 141 ISS 17  
FILE LAST UPDATED: 18 Oct 2004 (20041018/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 1 L3

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.36	160.51

FILE 'REGISTRY' ENTERED AT 20:54:37 ON 19 OCT 2004  
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DICTIONARY FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR

=> s 15

SAMPLE SEARCH INITIATED 20:57:46 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 90 TO ITERATE

100.0% PROCESSED 90 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1231 TO 2369  
 PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s l5 rfull

COMBINATION OF STRUCTURE AND TEXT TERMS NOT VALID

The query entered contains both search terms created by structure-building or screen commands and text search terms. L#s created via the STRUCTURE or SCREEN commands must be searched in the structures files separately from text terms or profiles. The L# answer sets from structure searches can be used in crossover searches and can be combined with text terms.

=> s l5 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 20:57:52 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 1714 TO ITERATE

100.0% PROCESSED 1714 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

L7 0 SEA SSS FUL L5

=> file reg

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	157.94	318.45

FILE 'REGISTRY' ENTERED AT 20:58:31 ON 19 OCT 2004  
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 DICTIONARY FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L8 STRUCTURE UPLOADED

=> s l8

SAMPLE SEARCH INITIATED 20:59:17 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED            5 ITERATIONS                            1 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:    ONLINE    \*\*COMPLETE\*\*  
                                      BATCH    \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS:                5 TO            234  
 PROJECTED ANSWERS:                    1 TO            80

L9                            1 SEA SSS SAM L8

=> s 18 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 20:59:21 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED -        100 TO ITERATE

100.0% PROCESSED            100 ITERATIONS                            18 ANSWERS  
 SEARCH TIME: 00.00.01

L10                           18 SEA SSS FUL L8

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	473.87

FILE 'HCAPLUS' ENTERED AT 20:59:24 ON 19 OCT 2004  
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FILE COVERS 1907 - 19 Oct 2004 VOL 141 ISS 17  
 FILE LAST UPDATED: 18 Oct 2004 (20041018/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 110

L11                           1 L10

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.36	476.23

FILE 'REGISTRY' ENTERED AT 20:59:29 ON 19 OCT 2004  
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DICTIONARY FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L12 STRUCTURE UPLOADED

=> d l12

L12 HAS NO ANSWERS

L12 STR

=> s l12

SAMPLE SEARCH INITIATED 21:04:52 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS

1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 5 TO 234

PROJECTED ANSWERS: 1 TO 80

L13 1 SEA SSS SAM L12

=> s l12 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 21:04:57 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 100 TO ITERATE

100.0% PROCESSED 100 ITERATIONS

26 ANSWERS

SEARCH TIME: 00.00.01

L14 26 SEA SSS FUL L12

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

158.78

635.01

FILE 'HCAPLUS' ENTERED AT 21:05:01 ON 19 OCT 2004

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FILE COVERS 1907 - 19 Oct 2004 VOL 141 ISS 17  
FILE LAST UPDATED: 18 Oct 2004 (20041018/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 114

L15 1 L14

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

2.36

637.37

FILE 'REGISTRY' ENTERED AT 21:05:06 ON 19 OCT 2004  
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DICTIONARY FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L16 STRUCTURE UPLOADED

=> s 116

SAMPLE SEARCH INITIATED 21:06:46 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 0 TO 0  
 PROJECTED ANSWERS: 0 TO 0

L17 0 SEA SSS SAM L16

=> s l16 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 21:06:50 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

L18 0 SEA SSS FUL L16

=>

L19 STRUCTURE UPLOADED

=> s l19

SAMPLE SEARCH INITIATED 21:08:27 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 11 TO 389  
 PROJECTED ANSWERS: 0 TO 0

L20 0 SEA SSS SAM L19

=> s l19 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 21:08:31 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 109 TO ITERATE

100.0% PROCESSED 109 ITERATIONS 0 ANSWERS  
 SEARCH TIME: 00.00.01

L21 0 SEA SSS FUL L19

=> a l19

L19 HAS NO ANSWERS  
 L19 STR

=>

L22 STRUCTURE UPLOADED

=> a l22

L22 HAS NO ANSWERS  
 L22 STR

25 63

Page 1-D

0 22

Page 1-F

S 23

N 24

Page 1-G

Page 2-A

Page 2-B

C 7

C 8

h

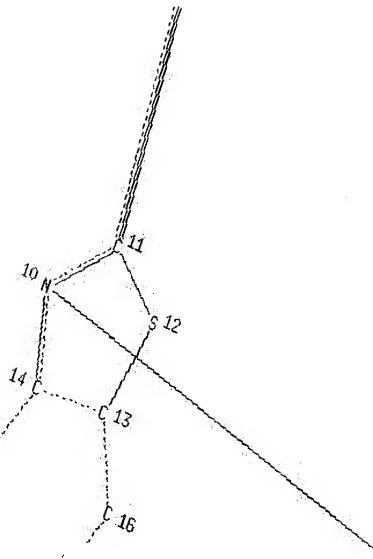
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g cg b

cg

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9 CM2

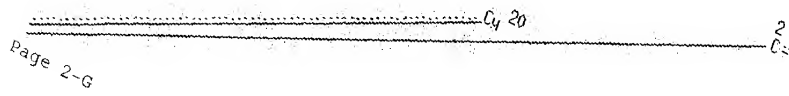


Page 2-D

Page 2-E

Page 2-F

C1



Page 2-G

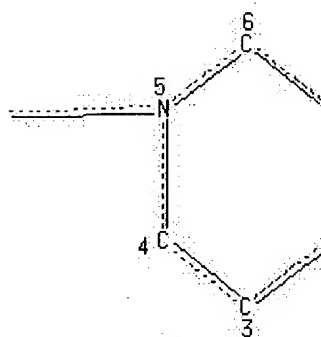
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eb c

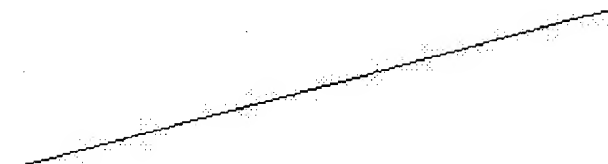
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cg

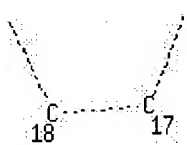
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Page 2-H



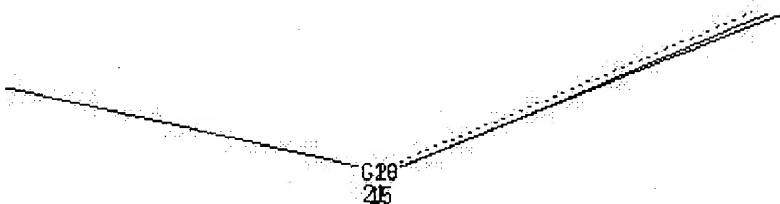
Page 3-A



Page 3-D



Page 3-E



Page 3-F

REP G19=(0-2) 1-2 1-20

REP G20=(1-2) 9-8 9-10

VAR G3=22/23/24

NODE ATTRIBUTES:

HCOUNT	IS M2	AT	9
NSPEC	IS C	AT	1
NSPEC	IS C	AT	2
NSPEC	IS R	AT	3
NSPEC	IS R	AT	4
NSPEC	IS R	AT	5
NSPEC	IS R	AT	6
NSPEC	IS R	AT	7
NSPEC	IS R	AT	8
NSPEC	IS C	AT	9
NSPEC	IS R	AT	10
NSPEC	IS R	AT	11
NSPEC	IS R	AT	12
NSPEC	IS R	AT	13
NSPEC	IS R	AT	14
NSPEC	IS C	AT	15

NSPEC IS R AT 16  
 NSPEC IS R AT 17  
 NSPEC IS R AT 18  
 NSPEC IS R AT 19  
 NSPEC IS C AT 20  
 NSPEC IS C AT 21  
 NSPEC IS C AT 22  
 NSPEC IS C AT 23  
 NSPEC IS C AT 24  
 NSPEC IS C AT 25  
 DEFAULT MLEVEL IS ATOM  
 MLEVEL IS CLASS AT 1 2 9 22 23 24  
 DEFAULT ECLEVEL IS LIMITED

## GRAPH ATTRIBUTES:

RSPEC 10  
 NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

=> s l22

SAMPLE SEARCH INITIATED 21:15:19 FILE 'REGISTRY'  
 SAMPLE SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 3 ANSWERS  
 SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
 BATCH \*\*COMPLETE\*\*  
 PROJECTED ITERATIONS: 8 TO 329  
 PROJECTED ANSWERS: 3 TO 163

L23 3 SEA SSS SAM L22

=> s l22 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
 DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
 FULL SEARCH INITIATED 21:15:24 FILE 'REGISTRY'  
 FULL SCREEN SEARCH COMPLETED - 165 TO ITERATE

100.0% PROCESSED 165 ITERATIONS 91 ANSWERS  
 SEARCH TIME: 00.00.01

L24 91 SEA SSS FUL L22

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	472.14	1109.51

FILE 'HCAPLUS' ENTERED AT 21:15:27 ON 19 OCT 2004  
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FILE COVERS 1907 - 19 Oct 2004 VOL 141 ISS 17  
FILE LAST UPDATED: 18 Oct 2004 (20041018/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 124

L25 1 L24

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.36	1111.87

FILE 'REGISTRY' ENTERED AT 21:15:37 ON 19 OCT 2004  
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STRUCTURE FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4  
DICTIONARY FILE UPDATES: 18 OCT 2004 HIGHEST RN 765254-38-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

L26 STRUCTURE UPLOADED

=> s 126

SAMPLE SEARCH INITIATED 21:17:39 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 100 TO ITERATE

100.0% PROCESSED 100 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 1401 TO 2599  
PROJECTED ANSWERS: 1 TO 80

L27 1 SEA SSS SAM L26

=> s 126 full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 155.00 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y  
FULL SEARCH INITIATED 21:17:45 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1749 TO ITERATE

100.0% PROCESSED 1749 ITERATIONS 58 ANSWERS  
SEARCH TIME: 00.00.01

L28 58 SEA SSS FUL L26

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	156.68	1268.55

FILE 'HCAPLUS' ENTERED AT 21:17:48 ON 19 OCT 2004  
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FILE COVERS 1907 - 19 Oct 2004 VOL 141 ISS 17  
FILE LAST UPDATED: 18 Oct 2004 (20041018/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 128

L29 23 L28

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75 ROCHER, J?/AU

L30 1 L29 AND ROCHER, J?/AU

=> d 130, ibib abs fhitstr, 1

L30 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

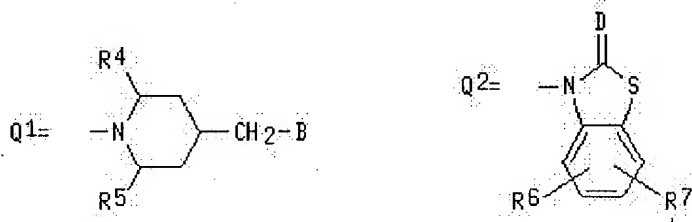
Full Text	Links
References	

ACCESSION NUMBER:	1999:311193 HCAPLUS
DOCUMENT NUMBER:	130:338102
TITLE:	Preparation of N-(aminoalkyl)- or N-(1-piperidinylmethyl)benzothiazoline derivatives as ligands for sigma-receptor
INVENTOR(S):	Rocher, Jean-Philippe; Yamabe, Haruko; Chaki, Haruyuki; Saito, Ken-ichi; Abe, Michikazu; Okuyama,



Masahiro  
 PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan  
 SOURCE: PCT Int. Appl., 95 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9923083	A1	19990514	WO 1998-JP4973	19981104
W: CA, CN, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1043319	A1	20001011	EP 1998-951687	19981104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11217377	A2	19990810	JP 1998-314459	19981105
PRIORITY APPLN. INFO.:			JP 1997-302607	A 19971105
			WO 1998-JP4973	W 19981104
OTHER SOURCE(S):		MARPAT 130:338102		
GI				



AB Compds. represented by the following formula, such as (R,S)-1-(1-adamantyl)-2-[4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidin-1-yl]ethanol, or salts thereof: X-Q-C(R1)(R2)-Z [wherein R1 and R2 each represents hydrogen, alkyl, cycloalkyl, hydroxyalkyl, or alkenyl; and Z represents either of groups NR3(CH2)p and Q1; wherein R3 represents alkyl, cycloalkyl, hydroxyalkyl, or alkenyl; p is an integer of 3 to 8; R4 and R5 each represents hydrogen or alkyl or they together with other interposing atoms represent a 5- to 7-membered heterocyclic ring; and B represents formula Q2 (wherein R6 and R7 each represents hydrogen, halogeno, NO2, alkyl, cycloalkyl, alkenyl, haloalkyl, OH, alkoxy, haloalkoxy, alkoxycarbonyl, Ph, (un)substituted NH2, alkylthio, etc.); D represents sulfur, oxygen, or (un)substituted NH; when X represents optionally alkyl-substituted mono- or polycyclic alkyl, cycloalkylalkyl, aryl, or heteroaryl, Q represents CO, C(:NOH), C(Y)(A) (wherein Y represents H, alkyl, alkenyl, alkynyl, etc. and A represent OH, alkoxy, cycloalkoxy, cycloalkylalkoxy, alkenyloxy, aryloxy, etc.); or when X represents a 8- to 10-membered bicyclic heteroaryl contg. 1 or 2 heteroatoms, Q represents single bond], which have high affinity to  $\sigma$ -receptors and exhibit small inhibition consts.  $K_i$  against  $\sigma$ -1 and/or  $\sigma$ -2 receptors, are prepd. Also claimed are therapeutics contg. I as the active ingredients for the treatment and/or prevention of diseases caused or enhanced by nerve-regulating effect of  $\sigma$ -ligands. They are useful for the treatment and/or prevention of central nervous system diseases, intestinal diseases, and cardiovascular diseases. Thus, 4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidine was condensed with 1-(bromoacetyl)adamantane in the presence of K2CO3 followed by NaBH4 redn.

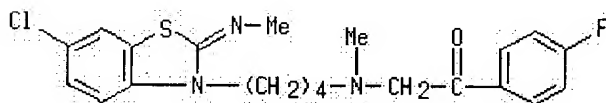
in ethanol and THF and acidification with HCl in EtOAc to give 1-(1-adamantyl)-2-[4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidin-1-yl]ethanol hydrochloride (II). II and 3-[[1-[2-(4-fluorophenyl)-2-oxoethyl]-4-piperidinyl]methyl]-5-chloro-2-oxobenzothiazoline hydrochloride inhibited the binding of [H3]-di-o-tolylguanidine to  $\sigma$ -receptor (P2 membrane fraction) prepn. from rat liver with Ki value of 7.0 and 3.1 nM, resp., as compared to Ki of 29 nM for haloperidol. A tablet, an injection, and an ointment formulation contg. II were described.

IT **224443-03-2P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of N-(aminoalkyl)- or N-(1-piperidinyl)benzothiazoline derivs. having high affinity to sigma-receptor as therapeutics)

RN 224443-03-2 HCAPLUS

CN Ethanone, 2-[[4-[6-chloro-2-(methylimino)-3(2H)-benzothiazolyl]butyl]methylamino]-1-(4-fluorophenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



# 2 HCl

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 20:50:26 ON 19 OCT 2004)

FILE 'REGISTRY' ENTERED AT 20:50:33 ON 19 OCT 2004

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L3 18 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 20:54:30 ON 19 OCT 2004

L4 1 S L3

FILE 'REGISTRY' ENTERED AT 20:54:37 ON 19 OCT 2004

L5 STRUCTURE UPLOADED

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L7 0 S L5 FULL

FILE 'REGISTRY' ENTERED AT 20:58:31 ON 19 OCT 2004

L8 STRUCTURE UPLOADED

L9 1 S L8

L10 18 S L8 FULL

FILE 'HCAPLUS' ENTERED AT 20:59:24 ON 19 OCT 2004

L11 1 S L10

FILE 'REGISTRY' ENTERED AT 20:59:29 ON 19 OCT 2004

L12 STRUCTURE UPLOADED

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L18 0 S L16 FULL  
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L22 STRUCTURE UPLOADED  
L23 3 S L22  
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L25 1 S L24

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L26 STRUCTURE UPLOADED  
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L28 58 S L26 FULL

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=> s l31 and okuyama, m?/au  
1001 OKUYAMA, M?/AU  
L36 0 L31 AND OKUYAMA, M?/AU

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L26 STRUCTURE UPLOADED  
L27 1 S L26  
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FILE 'HCAPLUS' ENTERED AT 21:17:48 ON 19 OCT 2004  
L29 23 S L28  
L30 1 S L29 AND ROCHER, J?/AU  
L31 22 S L29 NOT L30  
L32 0 S L31 AND YAMABE, H?/AU  
L33 0 S L31 AND CHAKI, H?/AU  
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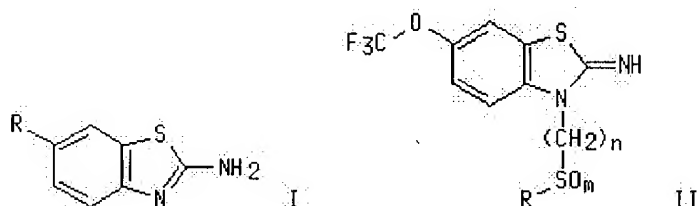
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L31 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text References

ACCESSION NUMBER: 1999:420020 HCAPLUS

DOCUMENT NUMBER: 131:144528  
TITLE: Riluzole Series. Synthesis and in Vivo "Antiglutamate" Activity of 6-Substituted-2-benzothiazolamines and 3-Substituted-2-imino-benzothiazolines  
AUTHOR(S): Jimonet, Patrick; Audiau, Francois; Barreau, Michel; Blanchard, Jean-Charles; Boireau, Alain; Bour, Yvette; Coleno, Marie-Annick; Doble, Adam; Doerflinger, Gilles; Do Huu, Claudine; Donat, Marie-Helene; Duchesne, Jean Marie; Ganil, Pierre; Gueremy, Claude; Honore, Eliane; Just, Bernard; Kerphirique, Roselyne; Gontier, Sylvie; Hubert, Philippe; Laduron, Pierre M.; Le Blevet, Joseph; Meunier, Mireille; Miquet, Jean-Marie; Nemecek, Conception; Pasquet, Martine; Piot, Odile; Pratt, Jeremy; Rataud, Jean; Reibaud, Michel; Stutzmann, Jean-Marie; Mignani, Serge  
CORPORATE SOURCE: Centre de Recherche de Vitry-Alfortville, Rhone-Poulenc S.A. Rhone-Poulenc Rorer, Vitry-sur-Seine, F 94403, Fr.  
SOURCE: Journal of Medicinal Chemistry (1999), 42(15), 2828-2843  
CODEN: JMCMAR; ISSN: 0022-2623  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GT



AB Two series of analogs of riluzole, a blocker of excitatory amino acid mediated neurotransmission, have been synthesized: monosubstituted 2-benzothiazolamines and 3-substituted derivs. Of all the compds. prepd. in the first series, only 2-benzothiazolamines bearing alkyl, polyfluoroalkyl, or polyfluoroalkoxy substituents in the 6-position showed potent anticonvulsant activity against administration of glutamic acid in rats. The most active compds. displaying in vivo antiglutamate activity were benzothiazolamines I [R = F3CO (riluzole), F3CCF2O, F3C, F3CCF2] with ED50 values between 2.5 and 3.2 mg/kg i.p. Among the second series of variously substituted benzothiazolines, compds. as active as riluzole or up to 3 times more potent were identified in two series: benzothiazolines bearing a  $\beta$ -dialkylaminoethyl moiety and compds. with an alkylthioalkyl chain and their corresponding sulfoxides and sulfones. The most potent derivs. were II [R = Me, m = 0, n = 2; R = Me, m = 1, n = 2] with ED50 = 1.0 and 1.1 mg/kg i.p., resp.. In addn., i.p. administration of some of the best benzothiazolines protected mice from mortality produced by hypobaric hypoxia.

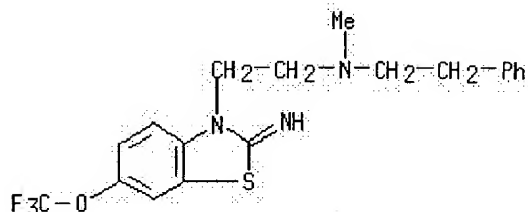
IT 139362-28-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

```
(prepn. of benzothiazolamines and iminobenzothiazolines as
anticonvulsant agents)
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RN 139362-28-0 HCAPLUS

CN 3(2H)-Benzothiazoleethanamine, 2-imino-N-methyl-N-(2-phenylethyl)-6-(trifluoromethoxy)-, dihydrochloride (9CI) (CA INDEX NAME)



# 2 HCl

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text References

ACCESSION NUMBER: 1999:70442 HCAPLUS  
DOCUMENT NUMBER: 130:217160  
TITLE: Transition metal complexes with sulfur ligands. Part 135. Electron-rich Fe and Ru complexes with the new trisamine dithiolate ligand 'N3H3S2'-H2 [2,2'-bis(2-mercaptophenylamino)diethylamine]  
AUTHOR(S): Sellmann, Dieter; Utz, Juergen; Heinemann, Frank W.  
CORPORATE SOURCE: Institut Anorganische Chemie, Universitaet Erlangen, Erlangen, D-91058, Germany  
SOURCE: European Journal of Inorganic Chemistry (1999), (2), 341-348  
CODEN: EJICFO; ISSN: 1434-1948  
PUBLISHER: Wiley-VCH Verlag GmbH  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB To obtain Fe and Ru complexes which are analogous to [M(L)('NHS4')] and [M(L)('N2H2S3')] complexes ['NHS4'2- = 2,2'-bis(2-mercaptophenylthio)diethylamine(2-), 'N2H2S3'2- = 2,2'-bis(2-mercaptophenylamino)diethylsulfide(2-)] but have electron-rich metal centers, the new pentadentate amine thiolate ligand 'N3H3S2'-H2 [= 2,2'-bis(2-mercaptophenylamino) diethylamine] was synthesized. The dianion 'N3H3S2'2- reacted with FeII salts to give high-spin [Fe('N3H3S2')] (I) [ $\mu_{\text{eff}}$  (293 K) = 3.94  $\mu_B$ ], which yielded diamagnetic [Fe(CO)('N3H3S2')] (II) upon reaction with CO. II exhibits a low-frequency  $\nu(\text{CO})$  band (1934  $\text{cm}^{-1}$  in THF) indicating an electron-rich Fe center and a strong Fe-CO bond. In spite of this, II readily dissocd. in soln. to I and CO. The reaction of [RuCl2(PPh3)3] with 'N3H3S2'2- yielded [Ru(PPh3)('N3H3S2')] (III), which proved inert with respect to PPh3 substitution but could be methylated at the thiolate donors. The resulting [Ru(PPh3)('N3H3S2'-Me2)]I2 (IV) proved as inert towards substitution as III. IV could reversibly be deprotonated to give [Ru(PPh3)('N3H2S2'-Me2)]I, in the course of which the [RuPN3S2] cores rearrange from CS to C1 symmetry. Reversible protonation/deprotonation was also found with [Ru(NO)('N3H2S2')] (V) which formed from [RuCl3(NO)(PPh3)2] and 'N3H3S2'2- in the presence of one addnl. equiv. of LiOMe. Protonation of V with HBF4 gave [Ru(NO)('N3H3S2')]BF4. The NMR spectra and the x-ray structure anal. of IV (IV.2CH2Cl2: monoclinic, P21/c, a = 1602.7(4), b = 1738.8(4), c = 1695.5(4) Å,  $\beta$  =

110.67(2)°,  $V = 4.421(2) \text{ nm}^3$ ,  $Z = 4$ ,  $\rho_c = 1.705 \text{ g/cm}^3$ ,  
 $\mu(\text{MoK}\alpha) = 2.154$ ,  $T = 163 \text{ K}$ , 7037 obsd. reflections with  $F_0 >$   
 $4\sigma(F_0)$ , 620 refined parameters,  $R_1 = 0.0334$ ,  $wR_2 = 0.0918$  proved  
that the  $[\text{RuPN}_3\text{S}_2]$  cores of III and IV exhibit a  $C_2$ -sym. meso structure.  
In all other complexes, however, the  $[\text{MLN}_3\text{S}_2]$  cores exhibit a  $C_1$ -sym.  
structure. It results from the fac-mer coordination mode of the  
'N $_3$ H $_3$ S $_2$ ' $_2$ - ligand and favors the planarity of amide donors when NH  
functions are reversibly deprotonated.

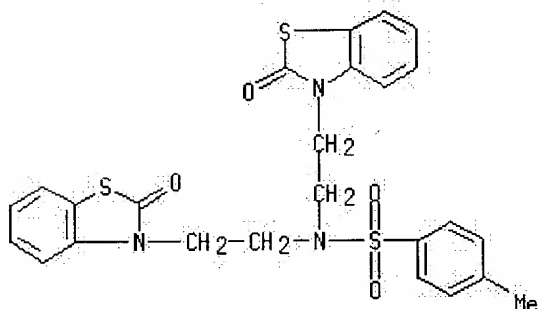
IT **220961-17-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn. and reactant for prepn. of Fe and Ru complexes with  
bis(2-mercaptophenylaminoethyl)amine)

RN 220961-17-1 HCAPLUS

CN Benzenesulfonamide, 4-methyl-N,N-bis[2-(2-oxo-3(2H)-benzothiazolyl)ethyl]-  
(9CI) (CA INDEX NAME)



L31 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

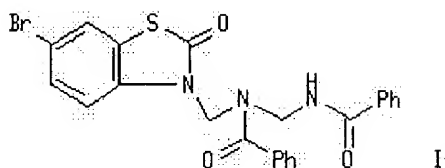
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ACCESSION NUMBER: 1997:189832 HCAPLUS  
DOCUMENT NUMBER: 126:186070  
TITLE: 3-[[N-Benzoyl-N-[(benzoylamino)methyl]amino]methyl]-6-bromo-2-benzothiazolinone, useful as a plant growth regulator and algicide, and method of its preparation.  
INVENTOR(S): Sidoova, Eva; Perjesy, Alexander; Mitterhauszerova, Ludmila; Kralova, Katarina  
PATENT ASSIGNEE(S): Univerzita Komenskeho, Slovakia  
SOURCE: Slovakia, 3 pp.  
CODEN: SLXXFO  
DOCUMENT TYPE: Patent  
LANGUAGE: Slovak  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SK 278189	B6	19960306	SK 1989-5894	19891018
PRIORITY APPLN. INFO.:			SK 1989-5894	19891018

GI

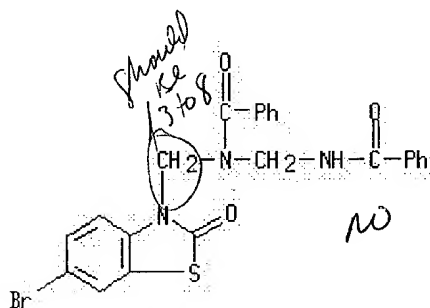


AB Title compd. I is prepd. in 72.0% crude yield by reaction of 6-bromo-2-benzothiazolinone with N-(hydroxymethyl)benzamide in refluxing 85% formic acid, and is purified by recrystn. from EtOH using active C. I inhibited growth and chlorophyll synthesis in the green alga *Chlorella vulgaris*, as well as rooting in corn.

IT **143837-79-0P**, 3-[[N-Benzoyl-N-[(benzoylamino)methyl]amino]methyl]-6-bromo-2-benzothiazolinone  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of [[benzoyl[(benzoylamino)methyl]amino]methyl]bromobenzothiazolinone as plant growth regulator and algicide)

RN **143837-79-0** HCAPLUS

CN Benzamide, N-[(benzoylamino)methyl]-N-[(6-bromo-2-oxo-3(2H)-benzothiazolyl)methyl]- (9CI) (CA INDEX NAME)



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L31 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

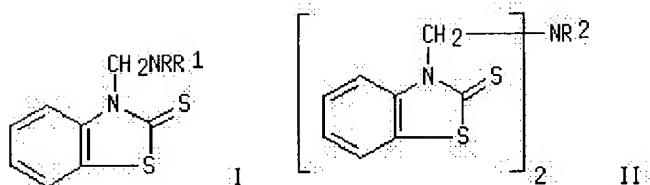
Full Text References

ACCESSION NUMBER: 1995:511824 HCAPLUS  
 DOCUMENT NUMBER: 123:85711  
 TITLE: Oxidation-resistant rubber compositions containing benzothiazoline-2-thiones as vulcanization accelerators  
 INVENTOR(S): Hatayama, Kazuya  
 PATENT ASSIGNEE(S): Bridgestone Corp, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07041604	A2	19950210	JP 1993-204472	19930728
PRIORITY APPLN. INFO.:			JP 1993-204472	19930728
OTHER SOURCE(S):	MARPAT	123:85711		

GI





AB The compns. contain vulcanizable rubbers and benzothiazoline-2-thiones I and/or II [R, R1, R2 = H, (un)substituted C1-18 alkyl, aryl, cycloalkyl, Bz, (meth)acryloyl]. Thus, a vulcanizate made from SBR 1500 100, carbon black 50, oil 10, stearic acid 2, antiaging agent 1, Zn flower 3, diphenylguanidine 0.5, and I (R, R1 = Me) 1.35 parts showed good aging resistance in air.

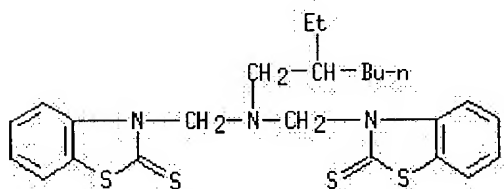
IT 63344-07-0

RL: CAT (Catalyst use); USES (Uses)

(vulcanization accelerator; oxidn.-resistant rubber compns. contg. benzothiazolinethiones as vulcanization accelerators)

RN 63344-07-0 HCAPLUS

CN 2(3H)-Benzothiazolethione, 3,3'-[[ (2-ethylhexyl)imino]bis(methylene)]bis-(9CI) (CA INDEX NAME)



L31 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text

Accession Number:

1993:234044 HCAPLUS

Document Number:

118:234044

Title:

Preparation of N-[(acylamino)ethyl]benzoxazolinones and analogs as nervous system agents

Inventor(s):

Yous, Said; Lesieur, Isabelle; Depreux, Patrick; Caignard, Daniel Henri; Guardiola, Beatrice; Adam, Gerard; Renard, Pierre

Patent Assignee(s):

Adir et Compagnie, Fr.

Source:

Eur. Pat. Appl., 65 pp.

CODEN: EPXXDW

Document Type:

Patent

Language:

French

Family Acc. Num. Count:

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Patent Information:

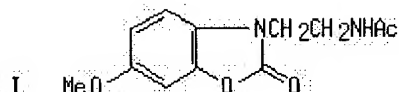
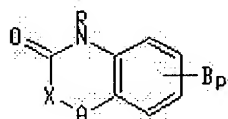
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EP 506539	B1	19970502		
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FR 2674524	A1	19921002	FR 1991-3538	19910325
FR 2674524	B1	19930521		
US 5240919	A	19930831	US 1992-848373	19920309
CA 2063885	AA	19920926	CA 1992-2063885	19920324
AU 9213112	A1	19921001	AU 1992-13112	19920324
AU 649115	B2	19940512		

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AT 152448	E	19970515	AT 1992-400782	19920324
ES 2102475	T3	19970801	ES 1992-400782	19920324
JP 05097828	A2	19930420	JP 1992-67453	19920325
JP 07094448	B4	19951011		
US 5300507	A	19940405	US 1993-55665	19930428
US 5322849	A	19940621	US 1993-54596	19930428
US 5322843	A	19940621	US 1993-54720	19930428
US 5326775	A	19940705	US 1993-54604	19930428
US 5386034	A	19950131	US 1993-78001	19930615
US 5436348	A	19950725	US 1994-223176	19940405
PRIORITY APPLN. INFO.:			FR 1991-3538	19910325
			US 1992-848373	19920309
			US 1993-78001	19930615

OTHER SOURCE(S):  
GI

MARPAT 118:234044



*check for more  
thats*

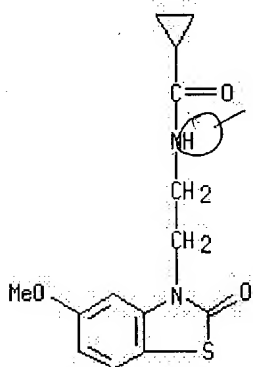
AB Title compds. [I; A = O, S; B = alkoxy, CH<sub>2</sub>CH<sub>2</sub>NR<sub>1</sub>COR<sub>2</sub>; R = H, alkyl, CH<sub>2</sub>CH<sub>2</sub>NR<sub>1</sub>COR<sub>2</sub>; R<sub>1</sub> = H, alkyl; R<sub>2</sub> = H, (halo)alkyl, cycloalkyl, (hetero)aryl, etc.; X = bond, CH<sub>2</sub>; p = 0, 1] were prep'd. as nervous system agents (no data). Thus, 6-methoxybenzoxazolinone was condensed with ClCH<sub>2</sub>CN and the product reduced to give, after acetylation, title compd. II.

IT **145094-77-5P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as nervous system agent)

RN 145094-77-5 HCAPLUS

CN Cyclopropanecarboxamide, N-[2-(5-methoxy-2-oxo-3(2H)-benzothiazolyl)ethyl]-  
(9CI) (CA INDEX NAME)



*R3 ≠ what is  
no*

*IS this  
103 (a)  
free amino  
-protected  
group*

L31 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full  
Text

ACCESSION NUMBER:

1993:191730 HCAPLUS

DOCUMENT NUMBER:

118:191730

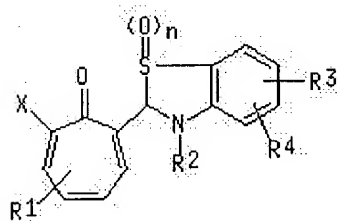
TITLE:

Preparation of benzothiazolinyltropolones for  
treatment of ischemia.

INVENTOR(S): McWhoster, William W.; Ito, Noriie; Ozawa, Kazunori;  
 Kushida, Hiroshi; Nomura, Toshiharu; Kuniyara, Mineo  
 PATENT ASSIGNEE(S): Upjohn Co., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
JP 04247077	A2	19920903	JP 1991-56252	19910131	
CA 2087004	AA	19920301	CA 1991-2087004	19910827	
CA 2087004	C	19980421			
EP 546102	A1	19930616	EP 1991-917948	19910827	
EP 546102	B1	19971015			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE					
HU 65943	A2	19940829	HU 1993-533	19910827	
JP 06509318	T2	19941020	JP 1991-516629	19910827	
JP 2512656	B2	19960703			
AT 159251	E	19971115	AT 1991-917948	19910827	
ES 2109276	T3	19980116	ES 1991-917948	19910827	
NO 9300669	A	19930225	NO 1993-669	19930225	
US 5594144	A	19970114	US 1995-442710	19950518	
US 5703071	A	19971230	US 1995-443972	19950518	
PRIORITY APPLN. INFO.:				JP 1990-229536	19900829
				JP 1991-56252	19910131
				JP 1991-39173	19910208
				WO 1991-US5906	19910827
				US 1993-975924	19930218

OTHER SOURCE(S): MARPAT 118:191730  
 GI



AB The title compds. [I; R1 = H, alkyl, (un)substituted aryl; R2 = H, alkyl, etc.; R3, R4 = H, alkyl, halo, OH, alkoxy, etc.; X = OH, alkoxy, etc.; n = 0, 1, 2] were prepd. E.g., 2-[(2-phenylethyl)amino]thiophenol (prepn. given) was refluxed with 2-methoxy-4-isopropyl-7-formyl-2,4,6-cycloheptatrien-1-one in toluene for 17 h to give I [X = MeO, R1 = 5'-iso-Pr, R2 = PhCH2CH2, R3 = R4 = H, n = 0]. At 0.1 mg/Kg i.p. this showed 50% effectiveness in counteracting brain ischemic rats in a learning study using rats.

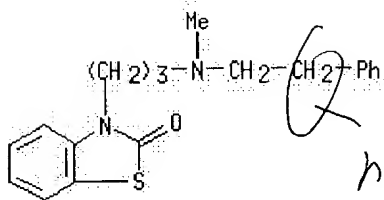
IT **142224-30-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as intermediate for benzothiazolinyltropolones for treatment of ischemia)

RN **142224-30-4** HCAPLUS

CN 2(3H)-Benzothiazolone, 3-[3-[methyl(2-phenylethyl)amino]propyl]- (9CI)

(CA INDEX NAME)

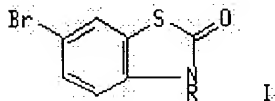


*can't just be ctz  
no Benzamide*

L31 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	References
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ACCESSION NUMBER: 1992:591740 HCAPLUS  
 DOCUMENT NUMBER: 117:191740  
 TITLE: 3-Substituted 6-bromo-2-benzothiazolinones and their antialgal and plant growth regulating activity  
 AUTHOR(S): Sidoova, E.; Gvozdzakova, A.; Kralova, K.; Mitterhauszerova, L.  
 CORPORATE SOURCE: Fac. Nat. Sci., Comenius Univ., Bratislava, 842 15, Czech.  
 SOURCE: Chemical Papers (1992), 46(2), 112-15  
 CODEN: CHPAEG; ISSN: 0366-6352  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



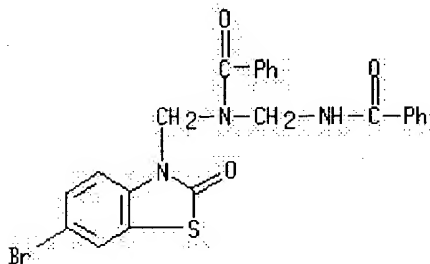
AB 6-Bromo-2-benzothiazolinone (I, R = H) and its 3-substituted derivs. I (R = Et, Pr, allyl, propargyl, CH<sub>2</sub>NBzCH<sub>2</sub>NHBz, Bz, CH<sub>2</sub>CH<sub>2</sub>OH, piperidinomethyl) were synthesized. The compds. were tested for plant growth regulating and antialgal activity.

IT **143837-79-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and plant growth regulating and algicidal activity of)

RN **143837-79-0** HCAPLUS

CN Benzamide, N-[(benzoylamino)methyl]-N-[(6-bromo-2-oxo-3(2H)-benzothiazolyl)methyl]- (9CI) (CA INDEX NAME)



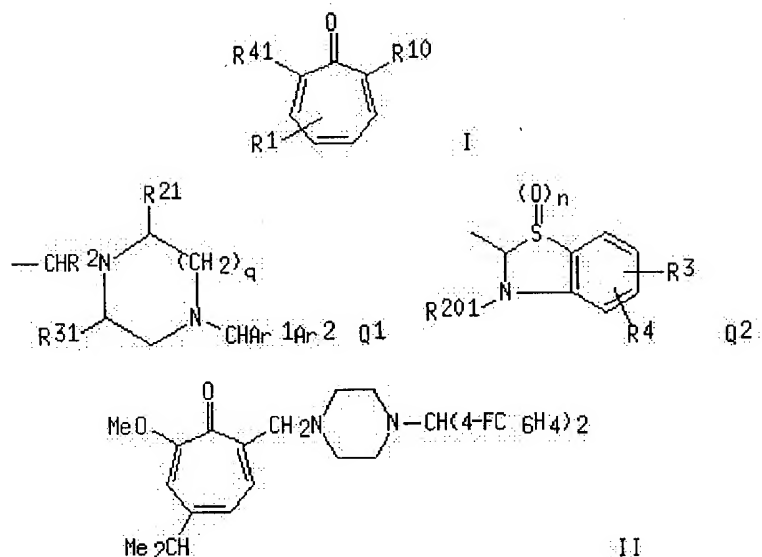
*no*

L31 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN



ACCESSION NUMBER: 1992:531223 HCAPLUS  
 DOCUMENT NUMBER: 117:131223  
 TITLE: Preparation of heterocycltropolones as ischemia inhibitors  
 INVENTOR(S): Ito, Noriie; Kuniyara, Mineo; Kushida, Hiroshi; McWhoster, William W.; Nomura, Syunji; Ozawa, Kazunori; Taniguchi, Mikeo; Tsuzuki, Tazuo  
 PATENT ASSIGNEE(S): USA  
 SOURCE: PCT Int. Appl., 77 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>WO 9204338</u>	A1	19920319	<u>WO 1991-US5906</u>	19910827
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MN, MW, NO, PL, RO, SD, SU, US				
RW: AT, BE, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN				
<u>JP 04120069</u>	A2	19920421	<u>JP 1990-229536</u>	19900829
<u>AU 9187203</u>	A1	19920330	<u>AU 1991-87203</u>	19910827
<u>AU 651629</u>	B2	19940728		
<u>EP 546102</u>	A1	19930616	<u>EP 1991-917948</u>	19910827
<u>EP 546102</u>	B1	19971015		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
<u>HU 65943</u>	A2	19940829	<u>HU 1993-533</u>	19910827
<u>JP 06509318</u>	T2	19941020	<u>JP 1991-516629</u>	19910827
<u>JP 2512656</u>	B2	19960703		
<u>NO 9300669</u>	A	19930225	<u>NO 1993-669</u>	19930225
PRIORITY APPLN. INFO.:			<u>JP 1990-229536</u>	19900829
			<u>JP 1991-56252</u>	19910131
			<u>JP 1991-39173</u>	19910208
			<u>WO 1991-US5906</u>	19910827
OTHER SOURCE(S):	MARPAT	117:131223		
GI				



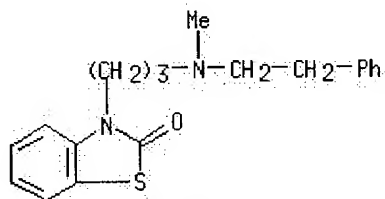
AB Title compds. I [R10 = Q1, Q2; R1, R2 = H, C1-5 alkyl, (substituted) aryl, (substituted) heterocyclyl; R3, R4 = H, (substituted) C1-5 alkyl, C7-20 aralkyl, C7-20 aralkyl contg. O, S, or N atoms; halo, OH, C1-5 alkoxy, cyano, etc.; R41 = OR3, OR6, NR7R8, etc.; R6 = H, (substituted) C1-5 alkyl, etc.; R7, R8 = H, (substituted) C1-5 alkyl, C7-20 aralkyl which may contain O, S, or N atoms; NR7R8 = 5-7 membered ring which may contain addnl. O or N atoms; R21, R31 = H, C1-3 alkyl; R201 = H, C1-5 alkyl, C2-20 aralkyl, C6-10 arylsulfonyl, C6-10 arylsulfonyl contg. O, S, or N atoms; Ar1, Ar2 = (substituted) aryl; n = 0-2; q = 1-2], were prepd. Thus, a soln. of 7-chloromethyl-4-isopropyl-2-methoxy-4-isopropyl-2,4,6-cycloheptatrien-1-one (prepn. given), 1-(4,4'-difluorobenzhydryl)piperazine, and Et3N in CHCl3 was refluxed for 20 h to give title compd. II. II had minimal ED of <5 mg/kg i.v. in a ischemic heart/reperfusion test in rats.

IT **142224-30-4P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as intermediate for ischemia inhibitors)

RN **142224-30-4** HCAPLUS

CN **2(3H)-Benzothiazolone, 3-[3-[methyl(2-phenylethyl)amino]propyl]-** (9CI)  
(CA INDEX NAME)



L31 ANSWER 9 OF 22 HCAPLUS. COPYRIGHT 2004 ACS on STN

Full  
Text

ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

1992:128911 HCAPLUS

116:128911

Benzothiazoline derivatives, process for their preparation, and drugs containing them

Gueremy, Claude; Jimonet, Patrick; Mignani, Serge

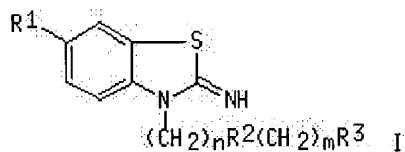
Rhone-Poulenc Rorer SA, Fr.

PCT Int. Appl., 29 pp.

CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9118892	A1	19911212	WO 1991-FR437	19910531
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
FR 2663029	A1	19911213	FR 1990-7068	19900607
FR 2663029	B1	19920731		
CA 2080005	AA	19911208	CA 1991-2080005	19910531
EP 532602	A1	19930324	EP 1991-910896	19910531
EP 532602	B1	19940803		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 05507918	T2	19931111	JP 1991-510727	19910531
ES 2057901	T3	19941016	ES 1991-910896	19910531
US 5340824	A	19940823	US 1992-938153	19921202
PRIORITY APPLN. INFO.:			FR 1990-7068	19900607
			WO 1991-FR437	19910531

OTHER SOURCE(S): MARPAT 116:128911  
 GI



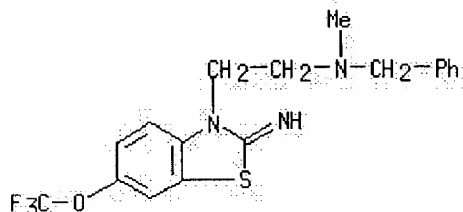
AB Benzothiazolines I [R1 = polyfluoroalkoxy; R2 = S, alkylimino, SO, SO2; R3 = Ph, Bz, NR4R5, 1-(phenylalkyl)-4-piperidiny; R4 = alkyl; R5 = phenylalkyl; n = 1-3; m = 0-3] and salts are prepd. as drugs for treating convulsions, schizophrenia, sleep disorders, cerebral ischemic phenomena, glutamate-related neurol. disorders, Alzheimer's disease (no data). For example, thioetherification of PhCH2NMeCH2CH2SH with 2-[2-(trifluoroacetylmino)-6-(trifluoromethoxy)-3-benzothiazolinyl]ethyl p-toluenesulfonate (prepd. in 3 steps) and subsequent salification gave I (R1 = CF3O, R2 = S, R3 = NMeCH2Ph, n = m = 2) as the dioxalate salt. Nine syntheses and 3 formulations are described.

# IT 139362-27-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of, as neurol. drug)

RN 139362-27-9 HCAPLUS

CN 3(2H)-Benzothiazoleethanamine, 2-imino-N-methyl-N-(phenylmethyl)-6-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

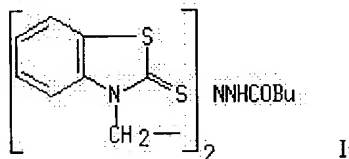


L31 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text      Citings  
References

ACCESSION NUMBER: 1988:406501 HCAPLUS  
DOCUMENT NUMBER: 109:6501  
TITLE: Preparation of valeric acid N',N'-bis[(2-thioxo-3-benzothiazolyl)methyl]hydrazide having antileukemic effect  
INVENTOR(S): Holbova, Elena  
PATENT ASSIGNEE(S): Czech.  
SOURCE: Czech., 2 pp.  
CODEN: CZXXA9  
DOCUMENT TYPE: Patent  
LANGUAGE: Slovak  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 236603	B1	19850515	CS 1981-7170	19811001
PRIORITY APPLN. INFO.: GI			CS 1981-7170	19811001



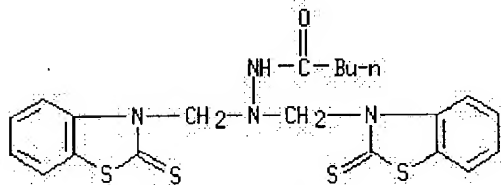
AB The title compd. (I) is prepd. by reaction of BuCONHNH2 with 2-mercaptobenzothiazole and CH2O. I is effective against lymphocytic leukemia P388. BuCONHNH2 (11.6 g) was mixed with 33.4 g 2-mercaptobenzothiazole and 200 mL EtOH and the mixt. was heated until it became clear. After addn. of 25 mL 30% formaldehyde, the mixt. was refluxed 10 min and cooled to give 27.4% I. The antileukemic activity against lymphocytic leukemia P388 was tested in female mice. At 50 mg/kg i.p. I increased life span 172%.

IT **76151-51-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as neoplasm inhibitor)

RN 76151-51-4 HCAPLUS

CN Pentanoic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



L31 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text      Citings  
References

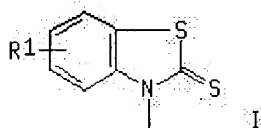
ACCESSION NUMBER: 1987:87459 HCAPLUS



DOCUMENT NUMBER: 106:87459  
 TITLE: Aminomethyl derivative of benzothiazolinethione as a lubricant additive  
 INVENTOR(S): Camenzin, Hugo; Phillips, Emyr  
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
 SOURCE: Eur. Pat. Appl., 27 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 203033	A2	19861126	EP 1986-810217	19860520
EP 203033	A3	19890503		
EP 203033	B1	19920311		
R: BE, CH, DE, FR, GB, IT, LI, NL				
CA 1261836	A1	19890926	CA 1986-509580	19860521
BR 8602353	A	19870121	BR 1986-2353	19860522
US 4737302	A	19880412	US 1986-866189	19860522
SU 1498394	A3	19890730	SU 1986-4027563	19860522
JP 61271283	A2	19861201	JP 1986-118988	19860523
JP 07084599	B4	19950913		
US 4803001	A	19890207	US 1988-141165	19880106
US 4810399	A	19890307	US 1988-141175	19880106
PRIORITY APPLN. INFO.:			CH 1985-2199	19850523
			US 1986-866189	19860522

GI



AB Lubricating oil additives (e.g., extreme-pressure, antiwear, anticorrosion, and antioxidants) are aminomethyl derivs. of benzothiazoline-2-thiones of structures X-CHR2NR3R4, XCHR2NR3CHR2X, and XCHR2NR3(R5)NR3CHR2X [X = I; R1 = H, C1-12-alkyl, C2-4-alkoxy, C1-24-alkoxycarbonyl, or NO2; R2 = H, C1-12-alkyl, 2-furyl or C1-4-alkyl-2-furyl, C1-4-alkoxy, C1-24-alkoxycarbonyl, or nitrophenyl; R3,R4 = H, C1-20-alkyl, aryl, oxo- or thiono-substituted groups, or alkylphenyl; R3R4 can be a 5- or 6-membered ring; R5 = C5-12-alkylene or heteroatom (O, N, S)-substituted alkylene, C6-15-cycloalkylene, C6-15-arylene (or substituted arylene); N(R3)R5N(R3) can be piperazine-1,4-diyl or substituted piperazine-1,4-diyl]. The additives are typically prep'd. from HX (X = I), R2CHO, and R3NHR4 (or R3NH2 or R3NHR5NHR3). A lubricating oil contg. 1 wt.% XCHR2NR3CHR2X (X = I; R1 = R2 = H; R3 = C18H35) had a weld load 200 kg (4-ball test) and wear scar diam. 0.06 mm, compared with 160 kg and 0.90 mm, resp., for the base oil contg. no additive.

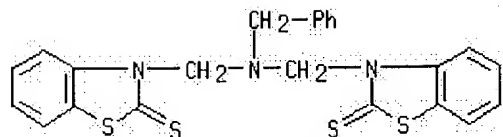
IT 63304-34-7

RL: USES (Uses)

(lubricating oil anticorrosion-antiwear-extreme pressure additive)

RN 63304-34-7 HCAPLUS

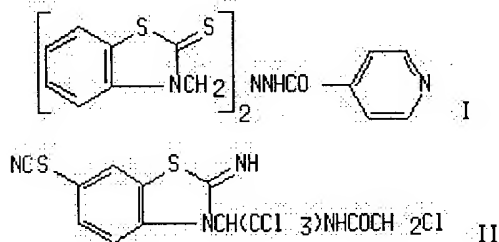
CN 2(3H)-Benzothiazolethione, 3,3'-[[ (phenylmethyl)imino]bis(methylene)]bis-(9CI) (CA INDEX NAME)



L31 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
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ACCESSION NUMBER: 1983:569092 HCAPLUS  
 DOCUMENT NUMBER: 99:169092  
 TITLE: Research in the field of new antituberculosic drugs.  
 Part IV. Derivatives of 2-mercaptobenzothiazole  
 AUTHOR(S): Odlerova, Z.; Holbova, E.; Sidoova, E.; Gvozdzakova,  
 A.; Mikulasek, S.; Lacova, M.  
 CORPORATE SOURCE: Vysk. Ustav Prev. Lek., Bratislava, Czech.  
 SOURCE: Studia Pneumologica et Phthisiologica Cechoslovaca  
 (1983), 43(4), 223-30  
 CODEN: SPPCAC; ISSN: 0371-2222  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Slovak  
 GI



AB Of the 325 title compds. screened for tuberculostatic activity against a  
 no. of different species and strains of Mycobacterium, both in vitro and  
 in vivo in mice, the most promising for further study were H-15 (I)  
 [71085-96-6] and SM-363 (II) [87500-73-0].

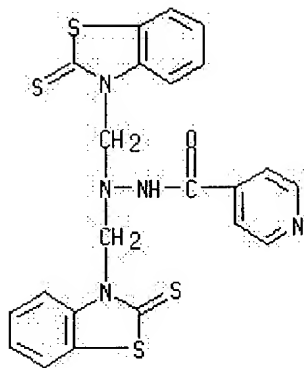
IT 71085-96-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES  
 (Uses)

(tuberculostatic activity of)

RN 71085-96-6 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-  
 benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



L31 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Citing References
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ACCESSION NUMBER: 1981:208752 HCAPLUS  
 DOCUMENT NUMBER: 94:208752  
 TITLE: Benzothiazole compounds. XVII. Preparation and biological activity of Mannich bases with 2-benzothiazolinone  
 AUTHOR(S): Sutoris, V.; Susoliakova, M.; Holbova, E.; Rada, B.  
 CORPORATE SOURCE: Fac. Nat. Sci., Komensky Univ., Bratislava, 816 31, Czech.  
 SOURCE: Chemicke Zvesti (1980), 34(5), 700-5  
 CODEN: CHZVAN; ISSN: 0366-6352  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 94:208752

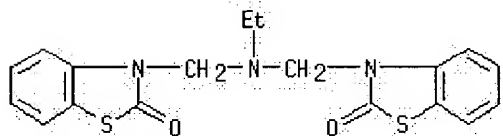
AB Reaction of 2-benzothiazolinone with HCHO and primary amines leads to formation of mono or bis aminomethyl derivs. Reaction of 2-benzothiazolinone with HCHO and secondary amines is also described. Position of the substituents on 2-benzothiazolinone was established by UV and IR spectroscopy. The prepd. compds. are less effective against mycobacteria and viruses than the corresponding derivs. of 2-benzothiazolinethione.

IT 77708-46-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and bactericidal and virucidal activity of)

RN 77708-46-4 HCAPLUS

CN 2(3H)-Benzothiazolone, 3,3'-[(ethylimino)bis(methylene)]bis- (9CI) (CA INDEX NAME)



L31 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

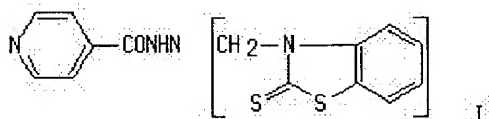
Full Text	Citing References
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ACCESSION NUMBER: 1981:156915 HCAPLUS  
 DOCUMENT NUMBER: 94:156915  
 TITLE: Isonicotinic acid bis[(2-thioxobenzothiazolin-3-yl)methyl]hydrazide  
 INVENTOR(S): Holbova, Elena; Odlerova, Zelimira  
 PATENT ASSIGNEE(S): Czech.

SOURCE: Czech., 4 pp.  
 CODEN: CZXXA9  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Slovak  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 180893	B	19790915	CS 1975-5036	19750716
PRIORITY APPLN. INFO.:			CS 1975-5036	19750716

GI



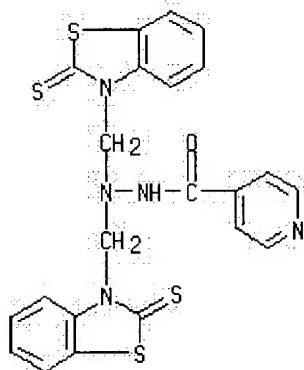
AB Refluxing a soln. of equimolar amts. of 2-mercaptobenzothiazole and isonicotinic acid hydrazide in abs. EtOH with dropwise feeding of a double molar amt. of an eq. 37% HCHO soln. gave 50.6% title compd. I. I exhibited in vitro tuberculostatic activity against 5 strains of Mycobacterium tuberculosis and had lower acute toxicity in mice than isoniazide and thiazole. The max. tolerated doses were 1,000 and 500 mg/kg for periods 24 h and 48 h, resp.

IT **71085-96-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and tuberculostatic activity of)

RN **71085-96-6** HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



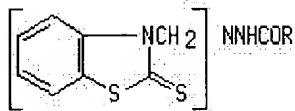
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L31 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text      References

ACCESSION NUMBER: 1981:30613 HCAPLUS  
 DOCUMENT NUMBER: 94:30613  
 TITLE: Benzothiazole compounds. XVI. Preparation and antimycobacterial activity of N',N'-bis[(2-thioxo-3-benzothiazolyl)methyl]hydrazides  
 AUTHOR(S): Holbova, E.; Odlerova, Z.

CORPORATE SOURCE: Inst. Chem., Komensky Univ., Bratislava, 816 50, Czech.  
 SOURCE: Chemicke Zvesti (1980), 34(3), 399-403  
 CODEN: CHZVAN; ISSN: 0366-6352  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



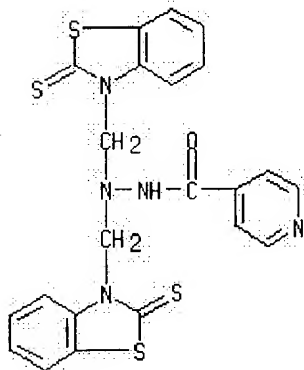
AB The reaction of 2-mercaptobenzothiazole with CH<sub>2</sub>O and RCONHNH<sub>2</sub> (R = alkyl, optionally substituted Ph, 4-pyridyl) resulted in bis derivs. of Mannich bases I. The relationship between the formation of bis derivs. and the α effect in hydrazides is explained. I have antimycobacterial activity at 1-50 µg/mL against Mycobacterium tuberculosis H37R4.

IT **71085-96-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and tuberculostatic activity of)

RN 71085-96-6 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



L31 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full  
Text

CHZ  
References

ACCESSION NUMBER: 1980:215432 HCAPLUS  
 DOCUMENT NUMBER: 92:215432  
 TITLE: N-Substituted oxobenzothiazolines  
 PATENT ASSIGNEE(S): Monsanto Co., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

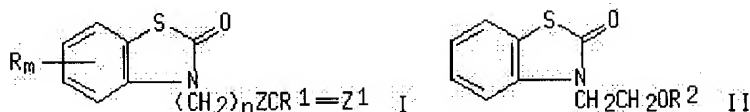
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<u>JP 54151966</u>	A2	19791129	<u>JP 1979-59801</u>	19790517
<u>US 4227915</u>	A	19801014	<u>US 1978-907233</u>	19780518
<u>PL 117589</u>	B1	19810831	<u>PL 1979-215531</u>	19790512
<u>EP 7161</u>	A1	19800123	<u>EP 1979-300849</u>	19790516
<u>EP 7161</u>	B1	19811021		
R: BE, CH, DE, FR, GB, NL, SE				
<u>DK 7902036</u>	A	19791119	<u>DK 1979-2036</u>	19790517
<u>BR 7903070</u>	A	19791204	<u>BR 1979-3070</u>	19790517
<u>ZA 7902419</u>	A	19800625	<u>ZA 1979-2419</u>	19790517
<u>AU 7947146</u>	A1	19801120	<u>AU 1979-47146</u>	19790517
<u>AU 518626</u>	B2	19811008		
<u>DD 145881</u>	C	19810114	<u>DD 1979-212964</u>	19790517
<u>CS 208500</u>	P	19810915	<u>CS 1979-3437</u>	19790517
<u>CA 1109467</u>	A1	19810922	<u>CA 1979-327946</u>	19790517
<u>IL 57318</u>	A1	19820131	<u>IL 1979-57318</u>	19790517
<u>HU 28040</u>	O	19831128	<u>HU 1979-MO1047</u>	19790517
<u>HU 184662</u>	B	19840928		

PRIORITY APPLN. INFO.:

US 1978-907233 19780518

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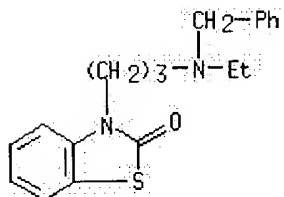
AB Benzothiazolinones I (R = alkyl, alkoxy, halo, CF<sub>3</sub>, NO<sub>2</sub>; m = 0-2; n = 1-3; R<sub>1</sub> = alkyl, alkenyl, benzyl, Ph, etc.; Z = O, S; Z<sub>1</sub> = O, S) (36 compds.) were prepd. I are plant growth regulators. Thus, 2-hydroxybenzothiazole was heated with aq. KOH and ClCH<sub>2</sub>CH<sub>2</sub>OH 5 h at 90-100° and 18 h at 25-30° to give 98% II (R<sub>2</sub> = H), which was esterified by refluxing with MeCO and NEt<sub>3</sub> in AcOEt 6 h to give 95% II (R<sub>2</sub> = CONHMe).

IT **73762-89-7P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and plant growth regulating activity of)

RN 73762-89-7 HCAPLUS

CN 2(3H)-Benzothiazolone, 3-[3-[ethyl(phenylmethyl)amino]propyl]- (9CI) (CA INDEX NAME)



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L31 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text CIPM References

ACCESSION NUMBER:

1979:517174 HCAPLUS

DOCUMENT NUMBER:

91:117174

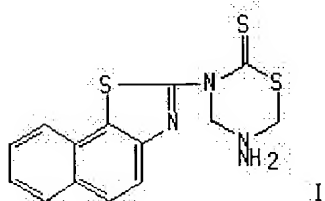
TITLE:

Antiviral activity of benzothiazole and benzothiazolinethione derivatives in cell cultures

AUTHOR(S):

Rada, B.; Holbova, E.; Mikulasek, S.; Sidoova, E.; Gvozdzakova, A.

CORPORATE SOURCE: Inst. Virol., Slovak Acad. Sci., Bratislava, 809 39, Czech.  
 SOURCE: Acta Virologica (English Edition) (1979), 23(3), 203-9  
 CODEN: AVIRA2; ISSN: 0001-723X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB A total of 58 derivs. of benzothiazole, benzothiazolinethione, and naphthothiazole were tested in vitro against vaccinia virus, Newcastle disease virus (NDV), and western equine encephalomyelitis (WEE). The virucidal activity was largely influenced by the chem. substituents in the mol. Five compds. showed medium and selective activity against vaccinia virus. One compd., 3-(2-α-naphthothiazolyl-5-(4-amino)-tetrahydro-1,3,5-thiadiazine-2-thione (I) [71156-13-3], inhibited both vaccinia and WEE viruses. NDV was inhibited by 2-mercaptobenzothiazole [149-30-4].

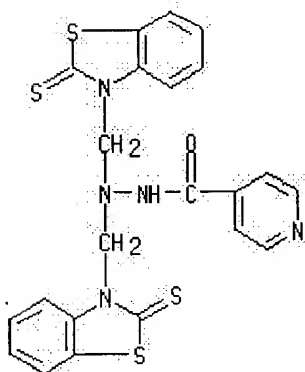
IT 71085-96-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(virucidal activity of)

RN 71085-96-6 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



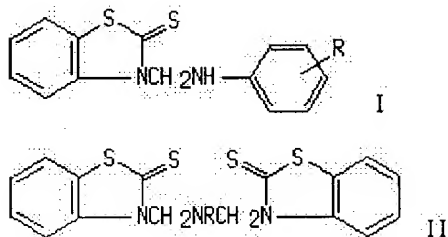
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L31 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text References

ACCESSION NUMBER: 1977:439353 HCAPLUS  
 DOCUMENT NUMBER: 87:39353  
 TITLE: Benzothiazole compounds. X. Mannich reaction of 2-mercaptobenzothiazole with primary amines  
 AUTHOR(S): Holbova, E.; Sutoris, V.; Blockinger, G.  
 CORPORATE SOURCE: Inst. Chem., Komensky Univ., Bratislava, Czech.

SOURCE: Chemicke Zvesti (1976), 30(2), 195-9  
 CODEN: CHZVAN; ISSN: 0366-6352  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



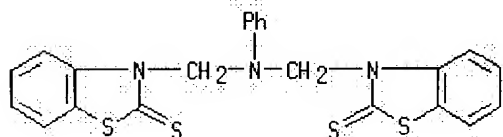
AB Aminomethylbenzothiazolinones I (R = p-Me, H, o-NO<sub>2</sub>) were obtained in 40-94% yield by Mannich reaction of mercaptobenzothiazole with CH<sub>2</sub>O and RC<sub>6</sub>H<sub>4</sub>NH<sub>2</sub> 10 min at 50-5°. Bis derivs. II [R = cyclohexyl, allyl, PhCH<sub>2</sub>, Me(CH<sub>2</sub>)<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>, MeOCH<sub>2</sub>CH<sub>2</sub>, MeO(CH<sub>2</sub>)<sub>3</sub>, Me<sub>2</sub>CHO(CH<sub>2</sub>)<sub>3</sub>] were obtained in 40-80% yields under analogous conditions. Amines with pKB 8-14 led to mono derivs. and amines with pKB 3-5 gave bis derivs.

IT 63304-32-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

RN 63304-32-5 HCAPLUS

CN 2(3H)-Benzothiazolethione, 3,3'-[(phenylimino)bis(methylene)]bis- (9CI)  
 (CA INDEX NAME)



L31 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text References

ACCESSION NUMBER: 1976:17208 HCAPLUS  
 DOCUMENT NUMBER: 84:17208  
 TITLE: Spasmolytic activities of aminomethyl derivatives derived from 2-mercaptobenzoxazole and 2-mercaptobenzothiazole  
 AUTHOR(S): Dhal, P. N.; Nayak, A.  
 CORPORATE SOURCE: Dep. Chem., Sambalpur Univ., Sambalpur, India  
 SOURCE: Indian Journal of Pharmacy (1975), 37(4), 92-4  
 CODEN: IJPAAO; ISSN: 0019-5472  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB Mannich reaction of 2-mercaptobenzoxazole and 2-mercaptobenzothiazole with amins gave the (aminomethyl) derivs. (I; X = O, S; R = morpholino, piperidino, pyrrolidino, Et<sub>2</sub>N, PhCH<sub>2</sub>NH), which in tests on strips of guinea pig ileum inhibited 50% of the spasm induced by a std. dose of acetylcholine in concn. range of 35-156 µg/ml, and the one by histamine acid phosphate in concn. range of 146-248 µg/ml.

IT 27410-38-4P

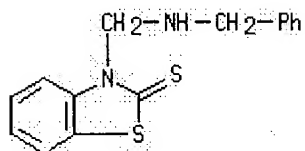
RL: SPN (Synthetic preparation); PREP (Preparation)



(prepn. and spasmolydic activity of)

RN 27410-38-4 HCAPLUS

CN 2(3H)-Benzothiazolethione, 3-[[[(phenylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



L31 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	References
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ACCESSION NUMBER: 1971:87880 HCAPLUS

DOCUMENT NUMBER: 74:87880

TITLE: Michael and Mannich reactions with benzothiazole-2-thiol

AUTHOR(S): Halasa, Adel F.; Smith, George E. P., Jr.

CORPORATE SOURCE: Cent. Res. Lab., Firestone Tire and Rubber Co., Akron, OH, USA

SOURCE: Journal of Organic Chemistry (1971), 36(5), 636-41  
CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

LANGUAGE: English

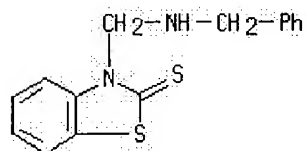
AB The reaction of the anion of benzothiazole-2-thiol (MBT) with activated olefins in the presence of NaH with Michael reaction acceptors produced 3-substituted benzothiazoline-2-thiones. Similarly, the Mannich reaction of MBT anion with HCHO and primary or secondary amines produced the N- (or 3-) substituted benzothiazoline-2-thiones. Possible mechanisms and supporting NMR, ir, and uv data are discussed. The N substitution of MBT anion is discussed within the framework of the oxibase scale which can predict the condition for formation of N products or S products from this ambident anion.

IT 27410-38-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 27410-38-4 HCAPLUS

CN 2(3H)-Benzothiazolethione, 3-[[[(phenylmethyl)amino]methyl]- (9CI) (CA INDEX NAME)



L31 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	References
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ACCESSION NUMBER: 1969:115050 HCAPLUS

DOCUMENT NUMBER: 70:115050

TITLE: Benzothiazoline derivatives. II. N-Substituted derivatives of 2-benzothiazolinethione by thiation of the 2-oxo analogs

AUTHOR(S): Sohar, Paul; Denny, George H., Jr.; Babson, Robert D.

CORPORATE SOURCE: Merck Sharp and Dohme Res. Lab., Merck and Co., Inc.,

SOURCE: Rahway, NJ, USA  
Journal of Heterocyclic Chemistry (1969), 6(2), 163-74  
CODEN: JHTCAD; ISSN: 0022-152X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 70:115050

GI For diagram(s), see printed CA Issue.

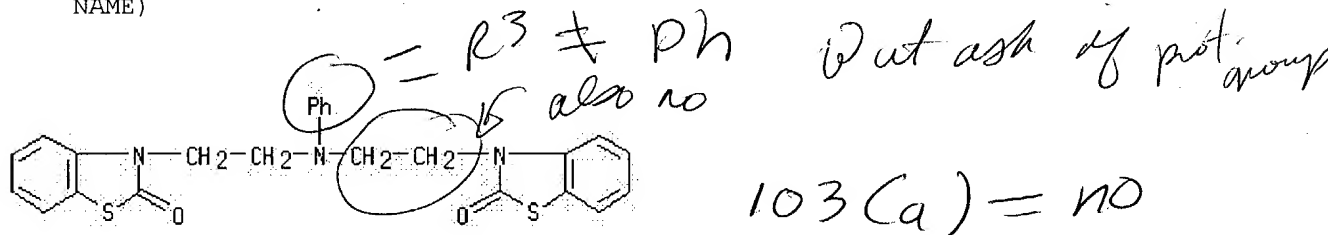
AB Thiation of the benzoate and acetate esters of 3-(2-hydroxyethyl)-2-benzothiazolinone gave the corresponding thiones. The benzoate was then deblocked to yield 3-(2-hydroxyethyl)-2-benzothiazolinethione (I), a compd. not accessible by direct addn. or substitution. Attempts to introduce a chlorine (or bromine) atom in place of the hydroxyl group in I or its S-isomer, 2-(2-hydroxyethylthio)benzothiazole, gave 2,3-dihydrothiazolo-[2,3-b]benzothiazolium chloride (or bromide) which undergoes dihydrothiazolo ring opening when treated with NaOH or Na<sub>2</sub>S to give bis[2-(2-benzothiazolinon-3-yl)ethyl]disulfide or bis[2-(2-benzothiazolinethion-3-yl)ethyl]disulfide, resp. 2-Benzothiazolinethione reacted with ethylenimine and with N-phenylethylenimine to give S-substituted derivs. Addn. to vinyl butyl ether gave the expected N-substituted deriv. which was found to undergo removal of the butoxyethyl group when subjected to conventional conditions for ether cleavage.

IT **22274-86-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

RN 22274-86-8 HCAPLUS

CN 2-Benzothiazolinone, 3,3'-[(phenylimino)diethylene]bis- (8CI) (CA INDEX NAME)



L31 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text  
References

ACCESSION NUMBER: 1960:128861 HCAPLUS  
DOCUMENT NUMBER: 54:128861  
ORIGINAL REFERENCE NO.: 54:24664h-i, 24665a-c  
TITLE: 2-Mercaptobenzothiazole in Mannich reactions. I. Synthesis, properties, and structure of Mannich bases  
AUTHOR(S): Stavrovskaya, V. I.; Kolosova, M. O.  
SOURCE: Zhurnal Obshchei Khimii (1960), 30, 689-94  
CODEN: ZOKHA4; ISSN: 0044-460X  
DOCUMENT TYPE: Journal  
LANGUAGE: Unavailable  
OTHER SOURCE(S): CASREACT 54:128861

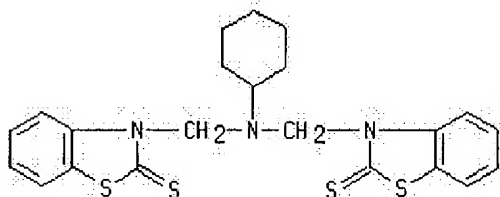
AB The Mannich bases from 2-mercaptobenzothiazole were unstable in aq. alkalis or acids or at elevated temps. Reaction of 5 ml. formalin (I) with 8.4 g. 2-mercaptobenzothiazole (II) in Me<sub>2</sub>CO gave 98% 3-piperidinomethylbenzothiazole-2-thione, m. 159-61°. Similarly were prepd. 3-morpholinomethylbenzothiazolyl-2-thione (III), m. 147-8°, and 3-diethylaminomethylbenzothiazolyl-2-thione, m. 90° (Brit. 377,253, CA 27, 4133). Reaction of HOCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub> with I and II in MeOH gave 57.7% N,N-bis(methylbenzothiazolyl-2-thione)aminoethanol, m. 130°. II and PhNH<sub>2</sub> in EtOH with I gave 88% 3-anilinomethylbenzothiazolyl-2-thione (IIIa), m. 105-7°.

Cyclohexylamine (IIIb) similarly gave 54.5% N,N-bis(methylbenzothiazolyl-2-thione)cyclohexylamine, m. 164-7°. Reaction of 16.7 g. II and 10 ml. I with 20 g. IIIb in EtOH gave 56% II cyclohexylammonium salt, m. 153-5°. III formed an HCl salt, m. 130-2° (open tube), 148° (sealed tube). All the bases were cleaved to mercaptobenzothiazole by 10% HCl or aq. AcOH. II and I in hot EtOH gave 96.5% 3-hydroxymethylbenzothiazolyl-2-thione (IV), m. 128-30°. This and PhNH<sub>2</sub> gave IIIa; similarly were run reactions with other amines to yield the above described Mannich bases (m.ps. shown in parentheses): morpholine (147-9°), Et<sub>2</sub>NH (88°), piperidine (157-8°). IV and IIIb gave the Schiff base, m. 157-8°. IV and SOCl<sub>2</sub> gave N-chloromethylbenzothiazolyl-2-thione, m. 123-5°, which with Zn dust in AcOH gave 71% N-methylbenzothiazolyl-2-thione, m. 88°.

IT 102757-22-2, 2-Benzothiazolinethione, 3,3'-  
[(cyclohexylimino)dimethylene]bis-  
(prepn. of)

RN 102757-22-2 HCAPLUS

CN 2(3H)-Benzothiazolethione, 3,3'-[(cyclohexylimino)bis(methylene)]bis-  
(9CI) (CA INDEX NAME)



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(FILE 'HOME' ENTERED AT 20:50:26 ON 19 OCT 2004)

FILE 'REGISTRY' ENTERED AT 20:50:33 ON 19 OCT 2004

L1 STRUCTURE UPLOADED  
L2 1 S L1  
L3 18 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 20:54:30 ON 19 OCT 2004

L4 1 S L3

FILE 'REGISTRY' ENTERED AT 20:54:37 ON 19 OCT 2004

L5 STRUCTURE UPLOADED  
L6 0 S L5  
L7 0 S L5 FULL

FILE 'REGISTRY' ENTERED AT 20:58:31 ON 19 OCT 2004

L8 STRUCTURE UPLOADED  
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L10 18 S L8 FULL

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L11 1 S L10

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L12 STRUCTURE UPLOADED  
L13 1 S L12

L14 26 S L12 FULL

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L15 1 S L14

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L16 STRUCTURE UPLOADED

L17 0 S L16

L18 0 S L16 FULL

L19 STRUCTURE UPLOADED

L20 0 S L19

L21 0 S L19 FULL

L22 STRUCTURE UPLOADED

L23 3 S L22

L24 91 S L22 FULL

FILE 'HCAPLUS' ENTERED AT 21:15:27 ON 19 OCT 2004

L25 1 S L24

FILE 'REGISTRY' ENTERED AT 21:15:37 ON 19 OCT 2004

L26 STRUCTURE UPLOADED

L27 1 S L26

L28 58 S L26 FULL

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L36 0 S L31 AND OKUYAMA, M?/AU

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627560 THU/RL

L37 6 L28/THU

(L28 (L) THU/RL)

=> s l37 and nerve

224970 NERVE

42386 NERVES

238102 NERVE

(NERVE OR NERVES)

L38 1 L37 AND NERVE

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L38 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

Full  
Text

Citing  
References

ACCESSION NUMBER: 1999:311193 HCAPLUS

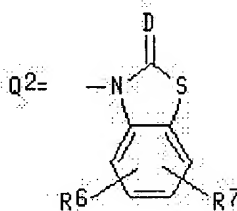
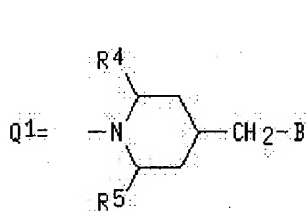
DOCUMENT NUMBER: 130:338102

TITLE: Preparation of N-(aminoalkyl)- or N-(1-piperidinylmethyl)benzothiazoline derivatives as ligands for sigma-receptor

INVENTOR(S): Rocher, Jean-Philippe; Yamabe, Haruko; Chaki, Haruyuki; Saito, Ken-ichi; Abe, Michikazu; Okuyama, Masahiro

PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan  
 SOURCE: PCT Int. Appl., 95 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9923083	A1	19990514	WO 1998-JP4973	19981104
W: CA, CN, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1043319	A1	20001011	EP 1998-951687	19981104
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11217377	A2	19990810	JP 1998-314459	19981105
PRIORITY APPLN. INFO.:			JP 1997-302607	A 19971105
			WO 1998-JP4973	W 19981104
OTHER SOURCE(S):	MARPAT 130:338102			
GI				



AB Compds. represented by the following formula, such as (R,S)-1-(1-adamantyl)-2-[4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidin-1-yl]ethanol, or salts thereof: X-Q-C(R1)(R2)-Z [wherein R1 and R2 each represents hydrogen, alkyl, cycloalkyl, hydroxyalkyl, or alkenyl; and Z represents either of groups NR3(CH2)p and Q1; wherein R3 represents alkyl, cycloalkyl, hydroxyalkyl, or alkenyl; p is an integer of 3 to 8; R4 and R5 each represents hydrogen or alkyl or they together with other interposing atoms represent a 5- to 7-membered heterocyclic ring; and B represents formula Q2 (wherein R6 and R7 each represents hydrogen, halogeno, NO2, alkyl, cycloalkyl, alkenyl, haloalkyl, OH, alkoxy, haloalkoxy, alkoxy-carbonyl, Ph, (un)substituted NH2, alkylthio, etc.); D represents sulfur, oxygen, or (un)substituted NH; when X represents optionally alkyl-substituted mono- or polycyclic alkyl, cycloalkylalkyl, aryl, or heteroaryl, Q represents CO, C(:NOH), C(Y)(A) (wherein Y represents H, alkyl, alkenyl, alkynyl, etc. and A represent OH, alkoxy, cycloalkoxy, cycloalkylalkoxy, alkenyloxy, aryloxy, etc.); or when X represents a 8- to 10-membered bicyclic heteroaryl contg. 1 or 2 heteroatoms, Q represents single bond], which have high affinity to  $\sigma$ -receptors and exhibit small inhibition consts.  $K_i$  against  $\sigma$ -1 and/or  $\sigma$ -2 receptors, are prepd. Also claimed are therapeutics contg. I as the active ingredients for the treatment and/or prevention of diseases caused or enhanced by nerve-regulating effect of  $\sigma$ -ligands. They are useful for the treatment and/or prevention of central nervous system diseases, intestinal diseases, and cardiovascular diseases. Thus, 4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidine was condensed with 1-(bromoacetyl)adamantane in the presence of K2CO3 followed by NaBH4 redn. in ethanol and THF and acidification with HCl in EtOAc to give

1-(1-adamantyl)-2-[4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidin-1-yl]ethanol hydrochloride (II). II and 3-[[1-[2-(4-fluorophenyl)-2-oxoethyl]-4-piperidinyl]methyl]-5-chloro-2-oxobenzothiazoline hydrochloride inhibited the binding of [H3]-di-o-tolylguanidine to  $\sigma$ -receptor (P2 membrane fraction) prepn. from rat liver with  $K_i$  value of 7.0 and 3.1 nM, resp., as compared to  $K_i$  of 29 nM for haloperidol. A tablet, an injection, and an ointment formulation contg. II were described.

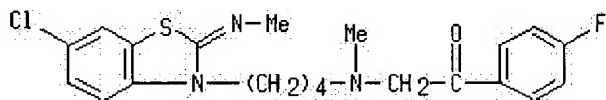
IT **224443-03-2P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of N-(aminoalkyl)- or N-(1-piperidinyl)benzothiazoline derivs. having high affinity to sigma-receptor as therapeutics)

RN 224443-03-2 HCAPLUS

CN Ethanone, 2-[[4-[6-chloro-2-(methylimino)-3(2H)-benzothiazolyl]butyl]methylamino]-1-(4-fluorophenyl)-, dihydrochloride (9CI) (CA INDEX NAME)



# 2 HCl

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 20:50:26 ON 19 OCT 2004)

FILE 'REGISTRY' ENTERED AT 20:50:33 ON 19 OCT 2004

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L2 1 S L1

L3 18 S L1 FULL

FILE 'HCAPLUS' ENTERED AT 20:54:30 ON 19 OCT 2004

L4 1 S L3

FILE 'REGISTRY' ENTERED AT 20:54:37 ON 19 OCT 2004

L5 STRUCTURE UPLOADED

L6 0 S L5

L7 0 S L5 FULL

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L8 STRUCTURE UPLOADED

L9 1 S L8

L10 18 S L8 FULL

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L11 1 S L10

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L12 STRUCTURE UPLOADED

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L38 1 S L37 AND NERVE

=> d l37, ibib abs fhitstr, 1-6

L37 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full  
Text

Chem  
References

ACCESSION NUMBER: 1999:311193 HCAPLUS  
DOCUMENT NUMBER: 130:338102  
TITLE: Preparation of N-(aminoalkyl)- or N-(1-piperidinylmethyl)benzothiazoline derivatives as ligands for sigma-receptor  
INVENTOR(S): Rocher, Jean-Philippe; Yamabe, Haruko; Chaki, Haruyuki; Saito, Ken-ichi; Abe, Michikazu; Okuyama, Masahiro  
PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan  
SOURCE: PCT Int. Appl., 95 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9923083	A1	19990514	WO 1998-JP4973	19981104

W: CA, CN, KR, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

EP 1043319 A1 20001011 EP 1998-951687 19981104

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

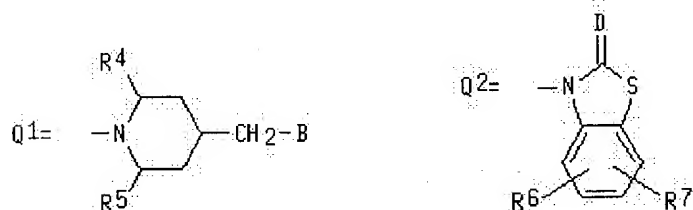
JP 11217377 A2 19990810 JP 1998-314459 19981105

PRIORITY APPLN. INFO.: JP 1997-302607 A 19971105

WO 1998-JP4973 W 19981104

OTHER SOURCE(S): MARPAT 130:338102

GI



AB Compds. represented by the following formula, such as (R,S)-1-(1-adamantyl)-2-[4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidin-1-yl]ethanol, or salts thereof: X-Q-C(R1)(R2)-Z [wherein R1 and R2 each represents hydrogen, alkyl, cycloalkyl, hydroxyalkyl, or alkenyl; and Z represents either of groups NR<sub>3</sub>(CH<sub>2</sub>)<sub>p</sub> and Q1; wherein R<sub>3</sub> represents alkyl, cycloalkyl, hydroxyalkyl, or alkenyl; p is an integer of 3 to 8; R<sub>4</sub> and R<sub>5</sub> each represents hydrogen or alkyl or they together with other interposing atoms represent a 5- to 7-membered heterocyclic ring; and B represents formula Q2 (wherein R<sub>6</sub> and R<sub>7</sub> each represents hydrogen, halogeno, NO<sub>2</sub>, alkyl, cycloalkyl, alkenyl, haloalkyl, OH, alkoxy, haloalkoxy, alkoxy carbonyl, Ph, (un)substituted NH<sub>2</sub>, alkylthio, etc.); D represents sulfur, oxygen, or (un)substituted NH; when X represents optionally alkyl-substituted mono- or polycyclic alkyl, cycloalkylalkyl, aryl, or heteroaryl, Q represents CO, C(:NOH), C(Y)(A) (wherein Y represents H, alkyl, alkenyl, alkynyl, etc. and A represent OH, alkoxy, cycloalkoxy, cycloalkylalkoxy, alkenyloxy, aryloxy, etc.); or when X represents a 8- to 10-membered bicyclic heteroaryl contg. 1 or 2 heteroatoms, Q represents single bond], which have high affinity to  $\sigma$ -receptors and exhibit small inhibition consts. K<sub>i</sub> against  $\sigma$ -1 and/or  $\sigma$ -2 receptors, are prepd. Also claimed are therapeutics contg. I as the active ingredients for the treatment and/or prevention of diseases caused or enhanced by nerve-regulating effect of  $\sigma$ -ligands. They are useful for the treatment and/or prevention of central nervous system diseases, intestinal diseases, and cardiovascular diseases. Thus, 4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidine was condensed with 1-(bromoacetyl)adamantane in the presence of K<sub>2</sub>CO<sub>3</sub> followed by NaBH<sub>4</sub> redn. in ethanol and THF and acidification with HCl in EtOAc to give 1-(1-adamantyl)-2-[4-(6-chloro-2-iminobenzothiazolin-3-ylmethyl)piperidin-1-yl]ethanol hydrochloride (II). II and 3-[[1-[2-(4-fluorophenyl)-2-oxoethyl]-4-piperidinyl]methyl]-5-chloro-2-oxobenzothiazoline hydrochloride inhibited the binding of [H<sub>3</sub>]-di-o-tolylguanidine to  $\sigma$ -receptor (P2 membrane fraction) prepn. from rat liver with K<sub>i</sub> value of 7.0 and 3.1 nM, resp., as compared to K<sub>i</sub> of 29 nM for haloperidol. A tablet, an injection, and an ointment formulation contg. II were described.

IT 224443-03-2P

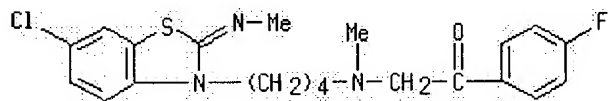
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic



use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of N-(aminoalkyl)- or N-(1-piperidinyl)benzothiazoline derivs.  
 having high affinity to sigma-receptor as therapeutics)

RN 224443-03-2 HCAPLUS

CN Ethanone, 2-[[4-[6-chloro-2-(methylimino)-3(2H)-  
 benzothiazolyl]butyl]methylamino]-1-(4-fluorophenyl)-, dihydrochloride  
 (9CI) (CA INDEX NAME)



# 2 HCl

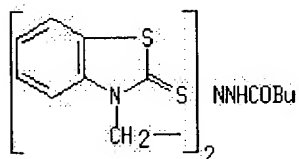
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L37 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text Cited References

ACCESSION NUMBER: 1988:406501 HCAPLUS  
 DOCUMENT NUMBER: 109:6501  
 TITLE: Preparation of valeric acid N',N'-bis[(2-thioxo-3-benzothiazolinyl)methyl]hydrazide having antileukemic effect  
 INVENTOR(S): Holbova, Elena  
 PATENT ASSIGNEE(S): Czech.  
 SOURCE: Czech., 2 pp.  
 CODEN: CZXXA9  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Slovak  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 236603	B1	19850515	CS 1981-7170	19811001
PRIORITY APPLN. INFO.: GI			CS 1981-7170	19811001



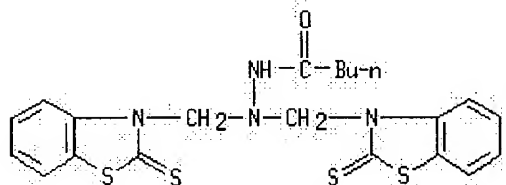
AB The title compd. (I) is prepd. by reaction of BuCONHNH2 with 2-mercaptobenzothiazole and CH2O. I is effective against lymphocytic leukemia P388. BuCONHNH2 (11.6 g) was mixed with 33.4 g 2-mercaptobenzothiazole and 200 mL EtOH and the mixt. was heated until it became clear. After addn. of 25 mL 30% formaldehyde, the mixt. was refluxed 10 min and cooled to give 27.4% I. The antileukemic activity against lymphocytic leukemia P388 was tested in female mice. At 50 mg/kg i.p. I increased life span 172%.

IT 76151-51-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of, as neoplasm inhibitor)

RN 76151-51-4 HCAPLUS

CN Pentanoic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)

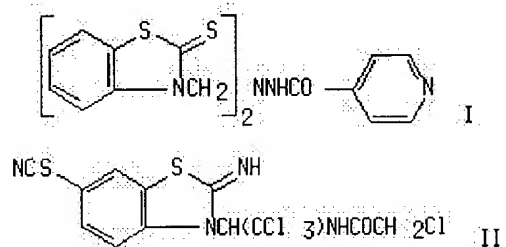


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L37 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text  
References

ACCESSION NUMBER: 1983:569092 HCAPLUS  
DOCUMENT NUMBER: 99:169092  
TITLE: Research in the field of new antituberculosic drugs. Part IV. Derivatives of 2-mercaptobenzothiazole  
AUTHOR(S): Odlerova, Z.; Holbova, E.; Sidoova, E.; Gvozdzakova, A.; Mikulasek, S.; Lacova, M.  
CORPORATE SOURCE: Vysk. Ustav Prev. Lek., Bratislava, Czech.  
SOURCE: Studia Pneumologica et Phtiseologica Cechoslovaca (1983), 43(4), 223-30  
CODEN: SPPCAC; ISSN: 0371-2222  
DOCUMENT TYPE: Journal  
LANGUAGE: Slovak  
GI



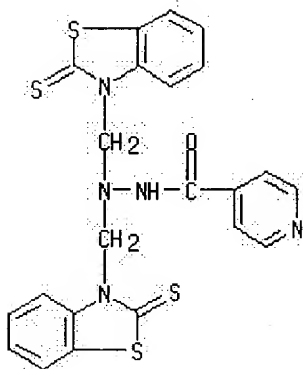
AB Of the 325 title compds. screened for tuberculostatic activity against a no. of different species and strains of Mycobacterium, both in vitro and in vivo in mice, the most promising for further study were H-15 (I) [71085-96-6] and SM-363 (II) [87500-73-0].

IT 71085-96-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); **THU (Therapeutic use)**; BIOL (Biological study); USES (Uses)  
(tuberculostatic activity of)

RN 71085-96-6 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



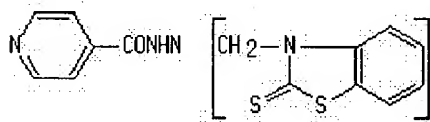
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L37 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	Chemical References
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ACCESSION NUMBER: 1981:156915 HCAPLUS  
 DOCUMENT NUMBER: 94:156915  
 TITLE: Isonicotinic acid bis[(2-thioxobenzothiazolin-3-yl)methyl]hydrazide  
 INVENTOR(S): Holbova, Elena; Odlerova, Zelimira  
 PATENT ASSIGNEE(S): Czech.  
 SOURCE: Czech., 4 pp.  
 CODEN: CZXXA9  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Slovak  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 180893	B	19790915	CS 1975-5036	19750716
PRIORITY APPLN. INFO.: GI			CS 1975-5036	19750716



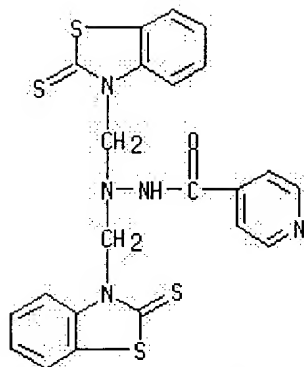
AB Refluxing a soln. of equimolar amts. of 2-mercaptobenzothiazole and isonicotinic acid hydrazide in abs. EtOH with dropwise feeding of a double molar amt. of an eq. 37% HCHO soln. gave 50.6% title compd. I. I exhibited in vitro tuberculostatic activity against 5 strains of Mycobacterium tuberculosis and had lower acute toxicity in mice than isoniazide and thiazole. The max. tolerated doses were 1,000 and 500 mg/kg for periods 24 h and 48 h, resp.

IT 71085-96-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. and tuberculostatic activity of)

RN 71085-96-6 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)

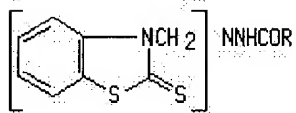


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L37 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text	CHNP References
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ACCESSION NUMBER: 1981:30613 HCAPLUS  
 DOCUMENT NUMBER: 94:30613  
 TITLE: Benzothiazole compounds. XVI. Preparation and antimycobacterial activity of N',N'-bis[(2-thioxo-3-benzothiazolyl)methyl]hydrazides  
 AUTHOR(S): Holbova, E.; Odlerova, Z.  
 CORPORATE SOURCE: Inst. Chem., Komensky Univ., Bratislava, 816 50, Czech.  
 SOURCE: Chemicke Zvesti (1980), 34(3), 399-403  
 CODEN: CHZVAN; ISSN: 0366-6352  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



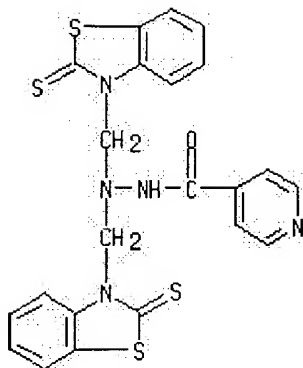
AB The reaction of 2-mercaptobenzothiazole with CH<sub>2</sub>O and RCONHNH<sub>2</sub> (R = alkyl, optionally substituted Ph, 4-pyridyl) resulted in bis derivs. of Mannich bases I. The relationship between the formation of bis derivs. and the α effect in hydrazides is explained. I have antimycobacterial activity at 1-50 μg/mL against Mycobacterium tuberculosis H37R4.

IT 71085-96-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. and tuberculostatic activity of)

RN 71085-96-6 HCAPLUS

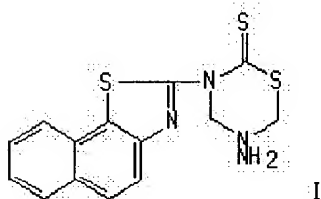
CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



L37 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2004 ACS on STN

Full Text      Cited References

ACCESSION NUMBER: 1979:517174 HCAPLUS  
 DOCUMENT NUMBER: 91:117174  
 TITLE: Antiviral activity of benzothiazole and benzothiazolinethione derivatives in cell cultures  
 AUTHOR(S): Rada, B.; Holbova, E.; Mikulasek, S.; Sidoova, E.; Gvozdzakova, A.  
 CORPORATE SOURCE: Inst. Virol., Slovak Acad. Sci., Bratislava, 809 39, Czech.  
 SOURCE: Acta Virologica (English Edition) (1979), 23(3), 203-9  
 CODEN: AVIRA2; ISSN: 0001-723X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



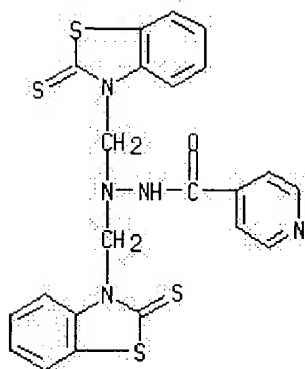
AB A total of 58 derivs. of benzothiazole, benzothiazolinethione, and naphthothiazole were tested in vitro against vaccinia virus, Newcastle disease virus (NDV), and western equine encephalomyelitis (WEE). The virucidal activity was largely influenced by the chem. substituents in the mol. Five compds. showed medium and selective activity against vaccinia virus. One compd., 3-(2- $\alpha$ -naphthothiazolyl-5-(4-amino)-tetrahydro-1,3,5-thiadiazine-2-thione (I) [71156-13-3], inhibited both vaccinia and WEE viruses. NDV was inhibited by 2-mercaptobenzothiazole [149-30-4].

IT 71085-96-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (virucidal activity of)

RN 71085-96-6 HCAPLUS

CN 4-Pyridinecarboxylic acid, 2,2-bis[(2-thioxo-3(2H)-benzothiazolyl)methyl]hydrazide (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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FILE 'REGISTRY' ENTERED AT 20:50:33 ON 19 OCT 2004

L1 STRUCTURE UPLOADED

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L3 18 S L1 FULL

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L5 STRUCTURE UPLOADED

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L7 0 S L5 FULL

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 L26 STRUCTURE UPLOADED  
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FILE 'HCAPLUS' ENTERED AT 21:17:48 ON 19 OCT 2004  
 L29 23 S L28  
 L30 1 S L29 AND ROCHER, J?/AU  
 L31 22 S L29 NOT L30  
 L32 0 S L31 AND YAMABE, H?/AU  
 L33 0 S L31 AND CHAKI, H?/AU  
 L34 0 S L31 AND SAITO, K?/AU  
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 L38 1 S L37 AND NERVE

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L39 ANSWER 1 OF 1 CAOLD COPYRIGHT 2004 ACS on STN  
 AN CA54:24664i CAOLD  
 TI 2-mercaptobenzothiazole in Mannich reactions - (I) synthesis, properties,  
 and structure of Mannich bases  
 AU Stavrovskaya, V. I.; Kolosova, M. O.  
 IT 3161-57-7 5392-35-8 6957-11-5 22075-92-9 27410-41-9 37437-20-0

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ANSWER 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 102757-22-2 REGISTRY

CN 2(3H)-Benzothiazolinethione, 3,3'-[(cyclohexylimino)bis(methylene)]bis-  
(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Benzothiazolinethione, 3,3'-[(cyclohexylimino)dimethylene]bis- (6CI)

MF C22 H23 N3 S4

SR CAOLD

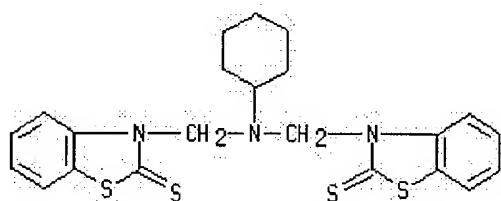
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS

(\*File contains numerically searchable property data)

DT.CA CAPLUS document type: Journal; Patent

RL.P Roles from patents: USES (Uses)

RL.NP Roles from non-patents: NORL (No role in record)



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

FILE 'CAOLD' ENTERED AT 21:22:52 ON 19 OCT 2004

=> fil reg; d acc 112298-86-9; fil CAOLD

FILE 'REGISTRY' ENTERED AT 21:22:56 ON 19 OCT 2004

ANSWER 1 REGISTRY COPYRIGHT 2004 ACS on STN

RN 112298-86-9 REGISTRY

CN 2-Benzothiazolinethione, 3,3'-[(2-hydroxyethylimino)dimethylene]bis- (6CI)  
(CA INDEX NAME)

FS 3D CONCORD

MF C18 H17 N3 O S4

SR CAOLD

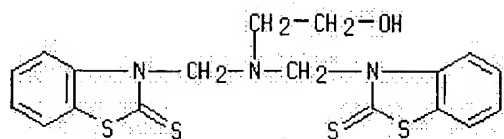
LC STN Files: BEILSTEIN\*, CA, CAOLD, CAPLUS, CHEMCATS

(\*File contains numerically searchable property data)

DT.CA CAPLUS document type: Journal

RL.NP Roles from non-patents: NORL (No role in record)





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)  
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

FILE 'CAOLD' ENTERED AT 21:22:56 ON 19 OCT 2004

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